

A Bibliography of Publications about the Python Scripting and Programming Language

Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA

Tel: +1 801 581 5254

FAX: +1 801 581 4148

E-mail: beebe@math.utah.edu, beebe@acm.org,
beebe@computer.org (Internet)

WWW URL: <http://www.math.utah.edu/~beebe/>

06 April 2022

Version 2.192

Abstract

This bibliography records books about the Python scripting and programming Language and related software.

Q [JWHS16]. *UnBlocks^{gen}* [Ras20].

-amino [WBS21]. **-d** [CC20, Pet02, RKVL14]. **-from-** [Bie21]. **-method** [DEMM19]. **-peptide** [WBS21]. **-Statistics** [JWHS16].

Title word cross-reference

. [Lip22]. **.NET** [SKS08, HF06, SM04, Stu07].

#105 [Bri12a]. **#106** [Bri12b].

/Python [LWH12, SV14].

1 [DB17, Hug18, RKVL14, Sch21]. **1.5** [SAA18]. **2** [SLDF⁺21]. **\$24.95** [Lee17]. **3** [Bra13, CC20, ML16a, Pet02, PBN⁺09, Ras20, SDS00, ZL20]. **\$34.95** [Ano00a]. **\$44.95** [Ano97a]. **\$63.96** [Lip22]. **\$99.95** [Lip21]. **β** [WBS21]. ***D*** [HH17]. **Γ** [DEMM19]. **μ** [Bie21]. ***N*** [HH17]. **ν** [Bie21].

1.0 [Bal18, BS19, KPK⁺17]. **1.x** [Sal18]. **10** [SV14]. **1004** [RG20]. **1016** [HFB21]. **10th** [ACM97]. **11** [Ano18]. **11th** [IEE97a]. **16** [HHJCRB21]. **1997** [Ano97d].

2 [DPSD08, JNN13, LS17, MP19a]. **2.0**

[Ano00c, MBW07, Seg07, SJJ18, Yes15]. **2.2** [Chu02b]. **2.6** [Pay11]. **2000** [Ano00c]. **2001** [Ano01a]. **2009** [Jan10]. **2020** [CLT20]. **23** [ESM98]. **251pp.** [Gve09]. **27th** [CLT20].

3 [Bea09a, Bea12, BJ14a, Fas18, HB16, Kiu13, Lee17, MP19a, MCGK19, MH15, Per14b, Phi10, Phi15, Pil09, SW15, SS21, Sum09, Sum10]. **3.0** [MMEH08, Per14b, RSPJ21, Wei09]. **3.1** [Pay11]. **3D** [PAB⁺97, SML06].

4 [CSZ⁺19, Cla15]. **4th** [Ass96, USE00].

5 [Dan18a].

6 [Ano13]. **6th** [Ano97c].

7 [Ano15a]. **77** [GH18, GHN19].

8 [Lip21]. **839** [Kir04].

9 [Ano15b]. **910** [Kor11]. **923** [Wim12]. **'96** [HK95, Ass96]. **'97** [ACM97]. **978** [Ano13, Ano15a, Ano15b, Cla15, Lee17, Lip21]. **978-0-12-418676-7** [Ano14]. **978-0-12-418683-5** [Ano14]. **978-0-521-72596-5** [Gve09]. **978-0-691-17050-3** [Lee17]. **978-1-032-04174-2** [Lip22]. **978-1-138-48395-8** [Lip21]. **978-1-4665-0455-4** [Cla15]. **978-1-59327-590-7** [Ano15a]. **978-1-59327-640-9** [Ano15b]. **978-1-59749-957-6** [Ano13]. **997** [Spe19].

Abaqus [GTC21]. **absolute** [Daw03, Daw06, Daw10, MTS⁺18]. **Abstract** [CBW⁺21]. **Abstraction** [Hen08, LP19]. **Abstractions** [RHM⁺17]. **accelerate** [LHM14]. **accelerated** [CWLG⁺21]. **Accelerating** [ZLBF14, YPB16]. **acceleration** [Wu13]. **Accelerator** [RSRT19]. **accelerators** [Mar18]. **acceptance** [Sal14]. **access** [BB17]. **Accessing** [Buc14]. **Accord** [Sta19]. **Accuracy** [LV20]. **acid** [WBS21]. **Acquisition** [CWM⁺21, Myr15]. **activation** [SH19b]. **Active** [BBB02, CHG⁺16, RKR21, Mit00]. **Active-subspaces** [CHG⁺16]. **ActiveState** [Ano00c]. **ACTS** [DGMP09]. **Ada** [Bri12a, Bri12b, Men09, Mos20b, Och09, RAH⁺01]. **adaptive** [SVY09]. **Adding** [IOC⁺12, Tab10]. **Additivity** [WV22]. **Adjoint** [HA20]. **Administration** [Bru09, GJ08, Sil14]. **adsorbed** [SSH16]. **Advanced** [Chu07a, LT03, DDK19, Lan13]. **Advances** [Poo16, Spo12]. **Adventures** [Ric15]. **affine** [RCAE⁺20]. **After** [DF21]. **again** [Cas20]. **against** [Pre03]. **age** [LL08]. **Agent** [EVV12, GG21]. **Agent-based** [GG21]. **agents** [HMD⁺96, Lot14b]. **Agglomerative** [Mül13]. **aggregate** [VFMM08]. **Agile** [Suc13, VB08, You08]. **Agoren** [Ano01a]. **Agreement** [EVV12]. **agricultural** [ZTC⁺21]. **AI** [ZGL20]. **AIL** [vd91]. **Ajax** [RDS07]. **Ajax-powered** [RDS07]. **aktuell** [EK08]. **aktuelles** [Lin06b]. **Alberta** [ACM97]. **Alexander** [Ish17]. **algebra** [BCG05, JCMG11, LKJC21, RV20, Sah15]. **Algorithm** [BTR14, HWJ⁺21, Wit15, AWO⁺21, HFB21, Kir04, Kor11, RG20, Spe19, Tau16, Wim12]. **Algorithm-Centric** [HWJ⁺21]. **Algorithms** [BH12, DD15, GMP⁺20, Het10, Het14, Jan10, KBLJ18, Di 13, DV21, RZ09, SUM21, VBM⁺18, Wep15]. **Alias** [GLS⁺10]. **Alice** [PAB⁺97, UVa95]. **all-atom** [HQF⁺20]. **alle** [Lin06b, The09]. **Allen** [Gve09]. **aller** [DF00]. **allow** [BM18]. **alternative** [MSS⁺19]. **always** [Buc15]. **amino** [WBS21]. **Amit** [Ano15b]. **analyses** [Spi18]. **Analysing** [ZTC⁺21]. **Analysis** [BHS18, CH17, GdGB⁺18, GDP18, HU17, ISMA18, KSB12, LV20, LS16, MAFM21, McK12, Mil18, MB07, OZW18, TGEA09,

VPO19, XL18, AM19, Bow15, BYL⁺21, CC20, Cue13, FPSZ21, GFB⁺14, GLS⁺10, GHKW22, GEH19, Hug18, Idr14, Ish17, IOC⁺12, ICVG14, KSS20, KS21, MP19a, MPMC21, NMGB17, Nel15, OLRLB21, Ras20, RJAL09, RRRGVD19, Sal18, SHFJ18, SLDF⁺21, SL20, Sto13, SH19b, Tom15, VCLS21, WPM⁺20, Wes15, Wet20, Yes15, LFT21]. **analysts** [O’C13]. **analytic** [MD22]. **Analytical** [NCS17, MS15, She15b]. **Analytics** [Lip22, CFÁA⁺20, DDK19, Mil14, Mil15, Nel15, RO15a, SK19]. **analyze** [Lay15, Lot14b, MB17, Wes15, ZAPS20]. **analyzing** [MTPHH18]. **Analyzing** [GRG21, HFF⁺17, MK16, PMBF17, YHX22]. **Andrew** [Ish17]. **Android** [Bar11]. **Andy** [Ano00a]. **angewendet** [Wei06a]. **angle** [MTPHH18, OLRLB21, SL20]. **angle-resolved** [SL20]. **animation** [vdH18]. **anisotropic** [BVV22]. **Annotated** [Di 13, Wep15, Bro00]. **Annotator** [HYG16]. **Annual** [ACM97, Ass96, USE00]. **anomalies** [MTS⁺18]. **Ansible** [DDT20]. **AnsibleMetrics** [DDT20]. **antenna** [SDP⁺20]. **Anthology** [Anoxxb]. **Antlab** [GMS17]. **Any** [Pre03]. **Apache** [TFAL21, TSC02]. **APEX** [Wai21]. **API** [Ano98b, AJH⁺12, BG17, FSZD20, Kuc98c, Men09, SGPHD⁺17, Smi17, van98c]. **APIs** [Meh15]. **App** [Pip15, San15]. **Application** [Ano01b, BSSz⁺20, Gut16, Orb18, Bah15, BL97a, Buc15, CS21, HQF⁺20, HCPF95, OE21, Ree04, Rem01b, SV14]. **application-programming** [SV14]. **Applications** [AJH⁺12, Ble20, DGMP09, Has16, ML16a, MSR03, Nil07a, Pul00, RM19, Shi07, BL97b, BCG05, CV15, CB96, DAJ⁺15, Di 13, GMP⁺20, Gup15, HF06, Har12, Hig03, Jos15, Kar14, Lot14a, MLB22, Pip15, RDS07, RG10, RCRS06, SW15, ST⁺07, SML06, Seg07, Ull15, Wei15, Wep15, Yan14, YHA⁺16, Zac15]. **apply** [Idr14]. **applying** [Sal14]. **Apprendre** [Swi09]. **apprenticeships** [Lon08]. **Approach** [EVV12, Joh15, Mat16, Mis19, Arb14, Bro06, FMPS17, HHK⁺09, SML06, SWD15, Sha03]. **Approaches** [KLM14, KLM15, Bra13, MD15, RMZG06]. **Approximate** [FV18]. **approxposterior** [FV18]. **apps** [Sal18]. **April** [IEE97a]. **ARC** [RSPJ21, Ano00c]. **ArcGIS** [Tom15]. **ArcGIS-geospatial** [Tom15]. **Architecture** [HM18, LLL⁺20]. **Architectures** [SBC⁺17]. **Archive** [Wal97]. **archives** [Bro00]. **ArcPy** [Tom15]. **Arduino** [DAJ⁺15, KSH14]. **Area** [SYGY21]. **ARITH** [CLT20]. **Arithmetic** [CLT20, KJ14, Bri06]. **Arizona** [Ano97d]. **ARL’s** [War18]. **ARM** [HC16]. **array** [Fas18]. **Arrays** [HH17, JM20]. **art** [Wei15, HC16]. **Article** [Wat95]. **Artificial** [Tan06]. **ASCII** [IG19]. **Asia** [IEE97b]. **aspiring** [Lot14b]. **assembly** [TBJ18]. **Assessing** [LJ19]. **assessment** [SUM21]. **assisted** [WRBT21]. **Associates** [Jan10]. **AST** [HWW⁺15, ZLBF14]. **Astroinformatics** [MAC14]. **astronomical** [HJPB17]. **astronomy** [Ish17, ICVG14]. **astrophysics** [MAC⁺21]. **asymmetric** [CFSK14]. **Atlanta** [USE00]. **Atmospheric** [vdOJP⁺20]. **ATNF** [Pit18]. **atom** [HQF⁺20]. **Atomic** [OPA⁺14, RSPJ21]. **atomistic** [HHP⁺16]. **Auction** [EVV12]. **Auction-Based** [EVV12]. **auroral** [ZRK21]. **Ausdrücke** [SKS08]. **AutoCNet** [LRPD18]. **autoDIAS** [SH19b]. **automan** [Ram18a]. **Automate** [Swe14, Tom15]. **Automated** [Bea98, HAB⁺20, LMW12, LLL⁺20, TS14, Law15, SH19b, LW10]. **Automatic** [LV20, MAC14, MO14, RCAE⁺20, RJAL09, SL21]. **Automating** [Ble20, RHM⁺17, JAGP14]. **Automation** [OZW18, Ram18a, Ste06]. **autonomous** [FMPS17, Len15]. **AutoParallel** [RCAE⁺20]. **avancées** [Chu07a]. **awarded** [Bal12]. **aware** [ABF13, VC18]. **Awk** [Bla02, Bla04]. **AWS** [Ano20].

axisymmetric [MFQ⁺21]. **Azure** [TCE21].
B [Gve09, Lip21]. **b/w** [Lip21]. **backed** [YHA⁺16]. **Bad** [Bea09a]. **badcrossbar** [JM20]. **Banded** [Wim12]. **Banff** [ACM97].
Based [Ang00a, Aya14, BBB02, DGMP09, EVV12, HWJ⁺21, Nor17, Ram18a, RSRT19, SN12, ZGL20, ABGD⁺20, AZLY18, BKMY03, BKMY04, BWMS22, BB17, CS21, CFMR19, CM20, CB96, Dav21, Dec04, GP22, GPP⁺21, GG21, Gup15, JAGP14, KSH14, Lac06, LHH⁺21, LYX⁺18, LDAL20, OL17, Ott18, PFH⁺16, PBN⁺09, RS17, Rad06, Rad08, RBP⁺21, SUM21, SABEH20, TEG18, VCLS21, YKKD19, FLR22]. **bases** [Sui09]. **Bash** [Bla02, Bla04, Ano12]. **Basic** [Het14, Tro96a, Het10]. **basierend** [Lac06]. **basierte** [Ric14]. **basis** [Kir04].
Bastard [RAH⁺01]. **Batteries** [Dub07]. **Battery** [HBA⁺20, KBC⁺20]. **Battery-free** [KBC⁺20]. **Bayes** [Sto13]. **Bayesian** [JG17, PHF10, Sto13, SBMD14]. **BDD** [Sal14]. **BeagleBone** [Hia15, Ric13, Ric14, Buc14]. **Beautiful** [Nai14]. **become** [BM15]. **Bed** [Ngu08a].
Beedle [Jan10]. **BEEP** [HBA⁺20]. **beginner** [Daw03, Daw06, Daw10, Swe13]. **beginners** [Can14, Cha15, Fla08, She15a, Swe14].
Beginning [Het05, Het08, KM15, McG07a, Mue14, Nag17, Pay11, Vai09, Vai14]. **behandelt** [LAG07]. **behavior** [WMM18]. **Behaviors** [GRG21]. **Beispiele** [The09]. **Beispielen** [The09]. **believe** [KI19]. **BEM** [ŠBA⁺15]. **benchmarking** [AES⁺22]. **benefits** [CEI⁺12]. **Best** [Hug97, Sco17, LS98, ZKB⁺08]. **best-bet** [LS98]. **bet** [LS98]. **Better** [Sit02, SW14, Sla15]. **between** [BLN⁺21, DOS17, LFT09, Sta17]. **beyond** [BMK03, GL08b, GL09, SB15]. **BFree** [KBC⁺20]. **bibliometrics** [RK19]. **Big** [SBC⁺17, VSS17]. **BIL** [BM18]. **Bildbearbeitung** [DF00]. **Bilder** [DF00]. **Binary** [AVS20]. **Bind** [Cot03]. **binding** [KVSC21]. **Bindings** [LFN⁺11, RJAL09]. **Biocomputing** [HK95]. **Bioinformatics** [AVS20, Ant15, Fla08, Bas08, Bas10, Kin09, SNB⁺19, SB15]. **Biological** [AJH⁺12, VBB18, XL18, ZV19]. **Biological-Modeling** [AJH⁺12]. **biologists** [LHB14]. **Biology** [MGS07, Di 13, LHM14, SB15, Wep15]. **biomolecular** [CBB14, CCFB16]. **bionic** [KI19]. **Black** [BLN⁺21, Sei14, Buc14, Ano15a]. **Black-box** [BLN⁺21]. **Blackboard** [UVa95]. **BLAKE** [AMPH14]. **blame** [VSS17]. **BLAS** [FSZD20]. **BLASFEO** [FSZD20]. **Blaxxun** [Ano00c]. **Bleeding** [Wil97a]. **Blitz** [AJJF14]. **Blood** [DB17]. **blueprints** [DDT20]. **Boca** [Lip21, Lip22]. **body** [Gra18]. **Book** [Ano97b, Ano97a, Ano00b, Ano00a, Ano13, Ano14, Ano15a, Ano15b, Bax01, Gve09, Hug01, Ish17, Ish19, Jan10, Joh97, Lak17, Lee17, Lip21, Lip22, LMW12, Mat16, Orb18, Roo98, Cha15, GHT06, GHT08]. **Bookshelf** [McG98c, Wil97b, Wil00, Wil01, Wil02]. **Boost** [Moo21, Lan13]. **boring** [Swe14]. **Borland** [Ano00c]. **Bose** [Nil07a]. **Both** [Hug97, Sma12, HB16]. **Boundary** [CFCB17, CCFB16, ŠBA⁺15, CBB14, KRH18]. **Boundary-integral** [CFCB17]. **Box** [RAH⁺01, BLN⁺21]. **Boy** [RAH⁺01]. **breadth** [Sha03]. **breadth-first** [Sha03]. **Bringing** [Mos20b]. **broken** [MWM20]. **Browser** [BP17, CB96]. **browser-based** [CB96]. **BSD** [DF00]. **BSP** [Hin03, HLS006]. **Buch** [vF97]. **Buchs** [The09]. **BuckinghamPy** [KS21]. **bug** [KCS11, LWH⁺10]. **bugs** [Ros08]. **Build** [RM19, Ada14, Bah15, Jos15, Lot14a, Nai14, Pip15, SML06, Tos09, Yan14, Zac15]. **Builder** [Dav21]. **Building** [BL97b, CR15, Gup15, Kar14, KDC⁺18, Rem01b, Ste06, DPH16, HF06, Hig03, HWW⁺15, RG10, Sal18, Seg07, VBM⁺18, WBS21]. **Buildings**

[ZGL20]. **built** [DTM⁺18, Hos12]. **built-in** [DTM⁺18]. **bulk** [SLDF⁺21]. **Business** [Ano01b].

C

[DF00, Jan10, Ano18, Bai08, Bea96, Bea98, BFM18, Bri06, BM18, CSZ⁺19, Cot03, Dal01, EPM09, GH18, GHN19, HAGH18, Kor11, LWH12, Nag06, Ngu08c, OE21, Pre03, Pul00, RZ09, Sah12, SV14, SML06, SGPHD⁺17, Smi18, SM04, Stu07, WX18, WMA12, Wil00, Yes15, Zho97, van98c]. **C#** [SKS08]. **C/C** [Bea98, Pul00, WMA12]. **CA** [Ano97a, Ano00a, Ass96]. **CAD** [Ano00c, CC20, Ngu08d]. **calculate** [MWM20]. **calculating** [Gre16]. **Calculation** [RG20, CFSK14, MR18, QZwu19]. **Calculations** [Kor11, OZW18, AM21, BLN⁺21, Cri18, Gra18, KPK⁺17, RSPJ21]. **Calculus** [BH12, Sah15]. **California** [ACM92, Ano97c]. **caloric** [SAA18]. **CALPHAD** [OL17]. **CALPHAD-based** [OL17]. **Cambridge** [Gve09]. **CameraTransform** [GRW⁺19]. **Can** [Dör08, CBB14]. **Canada** [ACM97, USE96]. **canonical** [PHH⁺12]. **can't** [KI19]. **capabilities** [She97]. **capacity** [Zie19b]. **capture** [SGPHD⁺17]. **Careers** [Ano20, Cas20]. **Carlo** [ABGD⁺20, DMD⁺21, DEMM19, HQF⁺20, Mor17, Nil07b, PHH⁺12, WAN⁺22]. **Case** [JWHS16, AJJF14, HPH12, LJ19, LHM14, OMGDG14, RCRS06, TFAL21, ÜK12]. **Case-Control** [JWHS16]. **Cassandra** [DMD⁺21]. **catalogue** [Pit18, Var16]. **causal** [SMM⁺22]. **cavities** [CBB14]. **CD** [DF00, Lin06b, The09]. **cell** [RKVL14]. **cellML** [CM07]. **census** [Smi17]. **Centric** [HWJ⁺21]. **CFD** [TGEA09]. **CG** [AJH⁺12]. **CGI** [Wei06a, Kuc98b, RG00, Van97b]. **CGI-Scripting** [Wei06a]. **cgimodel** [RG00]. **chain** [HQF⁺20, Mau02, You08]. **Challenges** [Sie17]. **Chameleon** [SVY09].

change [Cas17]. **Changes** [RAH⁺01, YHX22]. **Changing** [SYGY21]. **channel** [SGPHD⁺17]. **Chapman** [Ano01a, Lip21]. **characteristics** [CSRV13]. **charge** [ABS20]. **charges** [FH22]. **Charts** [SJM18, Ada14]. **ChebTools** [Ano18]. **Chebyshev** [Ano18]. **checking** [Hen08, RF16]. **chemical** [HPT⁺16, NCS17]. **chemistry** [BLN⁺21, Dah18a, PSGL21, VAP⁺21]. **ChemPy** [Dah18a]. **Chet** [Ano14]. **CHICOM** [GHN19]. **Chimera** [HCPF95]. **Chityala** [Myr15]. **CHIWEI** [GH18]. **Chlorophyll** [RKR21]. **Chlorophyll-a** [RKR21]. **choice** [AJJF14]. **Choose** [CLMM20]. **Choosing** [LS97]. **Christian** [Lak17]. **Chromatin** [CSZ⁺19]. **ChromStruct** [CSZ⁺19]. **cij** [LDW⁺21]. **Ciphers** [Swe13]. **Circuit** [MAFM21]. **city** [SUM21]. **Class** [Ngu08a, Hig03, RS17, TSD⁺12]. **classes** [How98, TSD⁺12, Ngu08c]. **Classification** [AVS20, BHF16, CFSK14, Sta17]. **clear** [Ram15]. **Client** [Lac06]. **climate** [GWM18, Ros18, WHG17]. **CLIMLAB** [Ros18]. **Cloud** [Suc13, Kla11, NEGZG18]. **Cluster** [BUS21, BLE21]. **Clustering** [JWHS16, Mül13]. **CMInject** [WAK22]. **CMIstark** [CFSK14]. **CMU** [Mac91, Mac92a, Mac92b]. **Cnerator** [OE21]. **CNNs** [SH19a]. **co** [Wu13]. **co-designed** [Wu13]. **Cobol** [Ano01b]. **coco** [Sta17]. **Code** [Ano00c, Ano01b, CSZ⁺19, GHN19, Har15, HAB⁺20, Mit00, The09, VMFG17, XMW10, ABGD⁺20, AM10, ABCV21, Ber13, BC09, Buc15, Cas17, CBLI22, Day07b, DBdFdSR21, GH18, Lot15b, LDW⁺21, MPMC21, MO14, OE21, RBV16, Ros08, SML06, SMM⁺22, WMM18, WZ18, YHX22, DDT20]. **Code-Beispiele** [The09]. **Codes** [Anoxxd]. **codice** [Day07a]. **Coding** [MAFM21, Cha15, DV21, ZKB⁺08]. **coeur** [Chu07b, Chu07a]. **COFFEE** [DFSW19].

coils [MFQ⁺21]. **cold** [MTPHH18].
cold-neutron [MTPHH18]. **Collaboration**
 [Ano01b]. **Collaborative** [SYGY21, VSS17].
Collation [Tau16]. **Collected** [Ngu08a].
collecting [Mit15, PMBF17]. **Collection**
 [GMN21, Ngu08d, Ngu08e]. **collections**
 [BDT13, DTM⁺18, SVY09]. **collective**
 [Seg07]. **Collector** [Roo97]. **color** [Lip22].
combined [AM10]. **Combining**
 [Zie19a, MS15]. **Comfort** [ZGL20, TS20].
Command [CC20, IG19, CWM⁺21].
commandi [Day07a]. **commands** [Day07b].
Comments [Roo97, VMFG17].
commercial [Tab10]. **Common**
 [Mac91, Mac92a, Mac92b, RO15b, RAH⁺01].
Communications [Ano00c]. **community**
 [Gar09]. **Comparative**
 [VPO19, Kak08, Mau02]. **comparing**
 [GHN19, MD15]. **Comparison**
 [Pre00, Zho97]. **Competitive** [DV21].
compilable [LKJC21]. **compilation**
 [MD15, WMA12]. **Compiler**
 [Ano01b, CEI⁺12, HS12, IOC⁺12, Mac92b,
 Ott18, TTS⁺10]. **Compiling**
 [Fee16, CGK11]. **complete**
 [BS19, DMD⁺21, Meh15, Sum09, Sum10].
completely [Ori97]. **complex**
 [LR14, She15b, WM21]. **Complexity**
 [DD15, ABCV21, KCS11]. **Compliant**
 [Ano01b]. **components** [HCPF95].
Composable [MLGW18]. **Composing**
 [RHM⁺17]. **composition** [BWMS22].
composition-structure [BWMS22].
compounds [DMC⁺15]. **comprehend**
 [Cox14]. **Comprehensive**
 [RO15b, RG10, Tel06, You08].
compressible [GP22]. **Compressive**
 [OPA⁺14]. **Computation**
 [AMGM20, Coe17, Gut13, Gut16, HA20,
 LLL⁺20, Orb18, SL21, Wim12, CM20, Gir21,
 Guz03, OC20]. **Computational** [Ano21,
 Aya14, Băc07, Bar21, Ble20, HM18, LT03,
 Lan08, MS07, OL17, VMFG17, Vir16, Bor07,
 HHK⁺09, Lan06, Lan07, MDRN18, PSGL21,
 RGS⁺21, SMM⁺22, TBA⁺17, VAP⁺21].
Computations
 [KJ14, AM10, CLM05, YFD98]. **Computer**
 [CLT20, Dow15, IEE97b, MR07, Can14,
 Dow09, Jos15, JCMG11, MTS⁺18, MH15,
 Rad06, RMZG06, San13, Swe13].
Computers [BT06]. **Computing**
 [AJYH18, BKRT21, BSSz⁺20, DD15,
 HTA⁺97, HM18, LHB14, LD07, Oli07, PG07,
 PGH11, Ram18a, TT21, VB08, BCRS15,
 BS19, BL97b, CSRV13, Cla15, Dan18a,
 DMC⁺15, DDMS14, DCOC⁺19, EBNS22,
 FKA⁺17, HHVB21, Her14, JM20, Kir04,
 LW10, Lub14, LS17, Mar18, Meh15, MBK09,
 Nil07a, Ras18, Ros13, Ros14, SAA18, YPB16].
concentrations [DMC⁺15]. **concentré**
 [Mar07]. **concepts** [BM15, UK12]. **concise**
 [Joh12, Ram15]. **concurrency** [Tab10].
concurrent [WO14]. **condensates** [Nil07a].
condensed [Sch21]. **Conditional** [Sco17].
Conference [ACM92, Ano97c, Eur91,
 HTA⁺97, IEE97b, USE96, USE00].
Confidence [PRH17]. **configuration**
 [Hos12, LJ19, QZWU19, VC18]. **confusion**
 [HJHZ18]. **Connolly** [Ish17]. **consistent**
 [FH22, SL21]. **console** [Rem01b]. **constants**
 [DCOC⁺19]. **constrained** [MWK⁺20].
constructed [HCPF95]. **Constructing**
 [ZV19, CB96]. **contact** [OLRLB21].
content [GFB⁺14, May21]. **context**
 [MR09, MBK09]. **continuation** [VY15].
contract [Plo97]. **contraction** [SG18].
Control
 [BBB02, JWHS16, KB07, BST⁺17, BE20].
Controlled [WX18, OE21]. **Controlling**
 [ZGL20, KSH14]. **conversion** [McF16].
convert [GZT⁺18]. **converter** [Sta17].
converting [Sta17, VAP⁺21]. **Convex**
 [Ble20]. **Cookbook**
 [Mar02, Roh16, XDR21, Ant15, BJ14a,
 Buc15, Cox14, Law15, MMA05, O'C13,
 Per14b, Ros14, Sar14, Zac15]. **cool** [Jos15].
cooling [EBNS22]. **COOTS** [USE96].
Copperhead [CGK11]. **Copula** [YH21].

CORBA [MSR03]. **Core** [Bax01, Chu01, Chu07c, Chu07b, Chu07a]. **Corner** [Ano01a]. **corner.py** [FM16]. **corpus** [Joh08]. **Correction** [Ano02]. **Corrections** [Spe19, GRW⁺19]. **correctness** [Hen08]. **correlation** [MR18, CWLG⁺21]. **correspondence** [LRPD18, RS17]. **cottoncandy** [NEGZG18]. **Counterexample** [LP19]. **counting** [GdGB⁺18]. **country** [Sta17]. **Coupled** [HM18]. **Coupling** [HM18]. **Course** [WX18, Fla08, GL07a, Guz03, MS15, Mau02, MSW08]. **courses** [RMZG06]. **cp** [Zie19b]. **cp-tools** [Zie19b]. **Cracking** [GAS⁺16]. **crafting** [Vai09, Vai14]. **CRAPPY** [CWM⁺21]. **CRC** [Cla15, Lip21, Lip22]. **Create** [Ano01a, Cha01, Kno08, Lay15, RDS07, Ull15]. **create-modify-reuse** [Kno08]. **Creating** [MD17, CR15, KL97, Mur18]. **creation** [WAN⁺22]. **creativity** [Gal14]. **Creator** [Chu02b]. **cross** [CFW17, HPT⁺16, Ull15]. **cross-machine** [CFW17]. **cross-platform** [HPT⁺16, Ull15]. **crossbar** [JM20]. **Crossing** [Gue18]. **crunching** [Wil05]. **cryptography** [Swe13]. **crystal** [FPSZ21]. **crystalline** [Zie19b]. **crystallography** [TV13]. **CS** [Sha03]. **CS1** [EPM09, GL07a, GL08c, Rad08]. **CS2** [EPM09]. **currents** [JM20]. **curriculum** [HRS06]. **customizable** [Bah15]. **Customized** [TGEA09]. **cutting** [RO15a]. **cutting-edge** [RO15a]. **CV** [Len15]. **Cyber** [Ano21]. **Cyber-Physical** [Ano21]. **CycFlowDec** [BS21]. **cycles** [BS21, Hug18]. **Cython** [Smi15].

d [CC20, Bra13, DB17, Hug18, ML16a, Pet02, PBN⁺09, RKVL14, Ras20, SDS00, Sch21, SAA18, SLDF⁺21, ZL20]. **D3GB** [BP17]. **DAEs** [SL21]. **DAG** [IG19]. **dark** [May21]. **Data** [Ano97d, Bad20, CSZ⁺19, GDP18, GRKN⁺19, Gut16, HC16, HHJCRB21, KJ15, KHD⁺16, MAFM21, McK12, MT18, MT19, ML16a, Mil18, Ngu08a, RZ09, RKR21, SBC⁺17, Van16, Wil05, Ada14, ASAA20, BST⁺17, BE20, BB17, BM15, BYL⁺21, CGK11, CFÁA⁺20, CR15, Cue13, DDK19, FKA⁺17, FRdN21, GdGB⁺18, GZT⁺18, GEH19, HPT⁺16, HFF⁺17, Idr14, Ish17, ICVG14, JAGP14, Jos16, LRPD18, Lay15, Lob19, Lot14b, Mad15, MB17, MTPHH18, MMG19, Mil14, Mil15, Mit15, NMGB17, Nel15, OLRLB21, Ras18, Ros13, Ros14, RC18, Sal18, SML06, She15b, Smi17, SH19a, Tom15, Var16, VCLS21, Wes15, Wet20, ASAA20, Orb18, Ish17, Jan10]. **data-driven** [BE20]. **data-intensive** [FKA⁺17]. **Database** [Ano00c, DDK19, SCAK⁺19, YHA⁺16]. **database-backed** [YHA⁺16]. **Databases** [GRG21]. **dataset** [RS17]. **Datasets** [HH17, HJPB17]. **Dateien** [DF00]. **Datenbanken** [The09, Wei06b]. **David** [Jan10]. **day** [Cha15, GL08b, GL09]. **DB** [Ano98b, Kuc98c]. **DB-API** [Ano98b, Kuc98c]. **dc** [CFSK14]. **Debian** [DF00]. **debt** [TFAL21]. **Debugging** [Par11, BL97a]. **December** [IEE97b]. **decision** [RBV16]. **declarative** [FMPS17]. **decomposing** [BS21]. **decomposition** [TEG18, DTR18]. **Deep** [JCY⁺19, LV20, RM19, BCM21, FLR22]. **deeper** [RO15a]. **defect** [DMC⁺15]. **defects** [AM21, BMZ⁺18, TR22]. **Deferred** [Spe19]. **defined** [Dah18b]. **defining** [RS17]. **Definitive** [HKM08, Gar09, Lot15b, Sum08]. **demonstration** [SCAK⁺19]. **demos** [Jos15]. **Dense** [Wim12]. **density** [MWK⁺20]. **Dependent** [KSB12]. **Derivative** [CFMR19]. **Derivative-free** [CFMR19]. **Derivatives** [AMGM20, HM18]. **derived** [ZAPS20]. **description** [Dec04]. **Design** [Ano01b, BBB02, Bro06, KL97, KB07, MMT09, MH18, Plo97, VKSB15, VCR17, BSS16, BCC⁺18, Dow09, Kas15, Len15, LHM14, MRG18, OA17, Wei15, Gve09].

designed [Wu13]. **Designing** [Mit00, CG17, ZKB⁺08]. **desktop** [Bah15, Law15]. **desukutoppu** [SM04]. **detailed** [Sar14]. **Detecting** [GAS⁺16]. **Detection** [SJK⁺21]. **detectors** [ABGD⁺20, LWH⁺10]. **determination** [SL21]. **detrended** [GHKW22]. **develop** [BSS16, DAJ⁺15, DV21, Gup15, Jos15, Pal14, SW14, Sar14, She15b]. **Developer** [Hug01, RAH⁺01, dos01, Ano19]. **developers** [Tos09]. **developing** [Har12, RCRS06, RH15]. **Development** [Ano00c, Ano01b, DF21, GdGB⁺18, Hin03, HKM08, KM15, LD07, Bah15, BL97a, CFÁA⁺20, Con95, FBC09, Gar09, Gov15, Mau02, McG07a, Per14a, Pip15, Ree04, SUM21, You08, Lac06]. **Devices** [Por03, KPK⁺17]. **Devito** [LLL⁺20]. **DEVSIMPy** [CS21]. **DEVSIMPy-mob** [CS21]. **DGB** [Par11]. **Diagnosis** [SJK⁺21, SL21]. **dialect** [Men09]. **DIETERpy** [GMKRS21]. **Different** [Bra13, KLM14, KLM15, Ori97, PBN⁺09, Sta17, Wep15]. **Differential** [BT06, GWW09, LT03, LMW12, MSL⁺07, DFSW19]. **differentiation** [SL21]. **Diffpack** [LT03, LM03]. **Diffusive** [BFM18]. **Digital** [Rad08, Hos14, LL08, Rad06, CWLG⁺21]. **Dimensional** [Pat16, KS21, ZAPS20]. **direct** [BE20, ML16b]. **discontinuous** [CBLI22]. **discover** [BS19]. **discrete** [CS21, DPH16, JEC18, vdH18]. **discrete-event** [CS21]. **Discretization** [BH12]. **Disease** [JWHS16]. **Diseases** [SJK⁺21]. **Dispatch** [GMKRS21]. **dispel4py** [FKA⁺17]. **display** [Wes15]. **Distance** [BSSz⁺20]. **distortion** [SH19b]. **distortion/interaction** [SH19b]. **Distributed** [Ano98c, ABC97, Eur91, BCM21, KI19, RCAE⁺20, SSH08, SCAK⁺19]. **distributed-memory** [SSH08]. **distributing** [ZKB⁺08]. **Distribution** [Ano00c]. **Distributions** [FV18]. **districts** [SUM21]. **dit** [JEC18]. **Dive** [Orr05, Pil04, Pil09]. **Django** [EK08, Alc09, Ben08, FBC09, Gup15, HKM08, MBW07]. **DJMol** [PSGL21]. **DNest4** [BFM18]. **DNN** [FLR22]. **DNN-Tuner** [FLR22]. **Docker** [ZMD21]. **Document** [Ano00c]. **documents** [KL97]. **Does** [She97]. **Doing** [Sah15, Ano15b]. **DOLFIN** [LW10, LWH12]. **domain** [HWW⁺15]. **domain-specific** [HWW⁺15]. **Done** [HKM08, LRvE17]. **données** [Swi09]. **Doping** [Ano21]. **dot** [KPK⁺17]. **Downey** [Gve09]. **Downscaling** [LVH⁺18]. **dozen** [Ros08]. **draw** [RC18]. **Dreaming** [Ros08]. **driven** [BE20, Gov15, Kin05, LGS10, Per14a]. **DropPy** [OLRLB21]. **dummies** [MM06, Mue14]. **dust** [Gre18]. **dustmaps** [Gre18]. **Dutch** [vdOJP⁺20]. **Dyer** [Ano00b]. **Dynamic** [DTR18, Ada14, AES⁺22, BC09, CEI⁺12, DTM⁺18, FhDAF09, GLS⁺10, LWH⁺10, MRG18, OMGDG14, RF16, SAA18, Wu13, YHA⁺16, YPB16]. **dynamical** [Mar17, Wie18]. **Dynamically** [Kla99, BDT13, IOC⁺12]. **dynamically-typed** [IOC⁺12]. **dynamics** [CMM14, GP22, JNN12, JNN13, KMK⁺21, LHH⁺21, PW17, SV14, Sch21, SSD⁺22]. **dynamism** [BCC⁺18]. **e-book** [Ano14]. **E-Business** [Ano01b]. **eadf** [SDP⁺20]. **Early** [HBA⁺20, Sev15a]. **Earth** [ZRK21]. **easily** [SW15]. **Easy** [RG00, SJL18, Arb14, Bea96, Cox14, Kla99, NEGZG18, PAB⁺97, Tos09]. **easy-to-comprehend** [Cox14]. **eBook** [Haj08]. **Econometrics** [CS09]. **Economics** [CLMM20]. **Ecosystem** [Bar21, PGH11, TFAL21]. **Eddy** [vdOJP⁺20]. **Eddylicious** [ML18]. **Edge** [Wil97a, RO15a]. **Edit** [BSSz⁺20]. **Editing** [Ano00c]. **Edition** [Ano00b, Orb18]. **Editor** [RAH⁺01, CB96, Dub07, Gar98]. **Education** [Bäc07, MS07, VMFG17, DDMS14].

educational [GP22]. **EEG** [CGHGRB21]. **eeglib** [CGHGRB21]. **effect** [CFSK14]. **Effective** [Sla15, Cri18, Ram15, Wha18]. **effects** [SAA18]. **efficiency** [AM10]. **Efficient** [CSRV13, CFÁA⁺20, DD15, GHKW22, KRH18, RG20, SN12, TEG18, Wim12, BM15, DBdFdSR21, McF16, Pal14, SW14, Sie17, SK19, Zac15]. **efficiently** [Lot14a]. **effmass** [Wha18]. **egtpplot** [MWS18]. **Eighth** [HTA⁺97]. **Einführung** [EK08, LAG07]. **Einsteiger** [Ric14]. **Einstein** [Nil07a]. **Einstieg** [The09]. **einum** [SG18]. **einum-like** [SG18]. **elastic** [SLDF⁺21]. **electric** [CFSK14]. **Electrical** [LYX⁺18]. **electro** [Wie18]. **electro-dynamical** [Wie18]. **electrochemical** [VCLS21]. **electrodynamics** [FH22]. **Electromagnetic** [LFN⁺11, BVV22]. **Electron** [ABGD⁺20, GDP18]. **Electronic** [BLN⁺21, GRG21, HTH⁺20]. **electrostatic** [ABS20]. **electrostatics** [CFCB17, CBB14, CCFB16, KRH18]. **Elektronik** [Ric14]. **Elektronik-Projekte** [Ric14]. **Element** [LMW12, RHM⁺17, TT21, AM10, KRH18, Kir04, LW10, LWH12, ZMS18]. **Elementary** [MS15]. **Elements** [Ano02, Ple02, CBB14, CCFB16, GTC21]. **embedded** [Cas17, CGK11, LHM14, Par11]. **Embedding** [Nag06, Pul00, van98b, GF18, Rie09, van95a]. **emphasizing** [Gar09]. **Empirical** [Pre00, SS13, KVSC21, MP19a]. **employer** [Ano20]. **ENA** [BG17]. **Enabling** [GDP18, KBC⁺20, PHH⁺12]. **ENASearch** [BG17]. **encoding** [SGPHD⁺17]. **encrypt** [Lot14b]. **End** [LD07, GHT06]. **Endogenous** [GMKRS21]. **ends** [MP19b]. **Energy** [LFT21, GDP18, HHM18, MWM20, MTPHH18, QZWU19, SUM21, WM21]. **Engine** [Ano00c, Ang99, SCAK⁺19, Pip15, San15]. **Engineering** [IEE97b, STS⁺18, VMFG17, Kiu10, Kiu13, MP19b, SML06, Yan14]. **Engineers** [MA11, Nag17, O'C13, Sei09]. **engines** [BKC14]. **English** [VPO19, ZV19]. **enhanced** [WO14]. **Ensemble** [AVS20]. **ensure** [Buc15]. **ensuring** [RS17]. **enter** [BCRS15]. **Enterprise** [Hig03]. **Entity** [KDC⁺18]. **entropy** [SR19]. **Entwicklung** [Lac06]. **Enumeration** [SN12]. **ENVI** [BM18]. **ENVI-BIL** [BM18]. **Environment** [Ano01b, Bar21, BKMY03, BMK03, BKMY04, Pal14, VFMM08]. **Environments** [McG98c]. **eqtools** [CFW17]. **equation** [Bra13, KSS20, MD21]. **Equations** [BT06, GWW09, LT03, LMW12, MSL⁺07, TT21, CKK⁺13, Dah18b, DFSW19, WZ18]. **equilibria** [CM20, CFW17]. **Equilibrium** [San13, DMC⁺15]. **Equivalent** [MH18]. **Era** [Sev15b]. **ergodicity** [MWM20]. **Errata** [Ano01a]. **ErsatzPasswords** [GAS⁺16]. **ESB** [Suc13]. **Essential** [Cop08, Joh08, Bea00, Bea01, Bea06, Bea09b, Bow15, Day07b, Lot14b]. **Essentials** [PR02, Bah15, BM15, CV15, FL06, Lot15b, Moh15, Wes15]. **Estimate** [CSZ⁺19]. **estimating** [WV22]. **Estimation** [Nor17, FRdN21, LWV20, ZTC⁺21]. **èÜbungsaufgaben** [The09]. **EurOpen** [Eur91]. **Evaluating** [Dör08, AES⁺22]. **Evaluation** [ABCV21, GMKRS21, HBA⁺20, KLM14, KLM15, RO15b, TTS⁺10, BHJ⁺18, CSRV13, IOC⁺12, MD15, TR22, VKSB15]. **evaluator** [Huc18]. **even** [LR14]. **événements** [Swi09]. **Event** [Kin05, CS21, DPH16, HQF⁺20, vdH18]. **event-chain** [HQF⁺20]. **Event-driven** [Kin05]. **events** [LRvE17, WRBT21]. **everyday** [Wil05]. **evidence** [LFT09]. **Evolution** [TFAL21, DFSW19, Yes15]. **Evolutionary** [MWS18, Wie18]. **exact** [Bri06]. **Examining** [Ang99, CK00]. **example** [Jos15, RH15]. **Examples** [Lip22]. **excited** [LHH⁺21]. **exciting** [BCRS15, Gup15]. **Execution** [JCY⁺19, BKC14, DM20, RCAE⁺20, Spi18].

exemple [MRA06]. **existing** [Lot15b]. **ExoData** [Var16]. **exoplanet** [Var16]. **expanded** [RSPJ21]. **Expansion** [HJJ+22]. **expansions** [Ano18]. **Experience** [CM07, Pop10]. **Experiences** [SBC+17]. **Experiment** [WX18, BST+17]. **experimental** [CWM+21, KSH14]. **experiments** [MD17, MAFM21, CG17]. **Expert** [Sma12, ZKB+08]. **Explain** [VMFG17]. **explaining** [LFT09]. **Explicit** [HPH12]. **Explorative** [HLR15]. **explore** [Dan18a, Jos16, Mad15, Sah15]. **Explorer.py** [WM21]. **exploring** [BMK03, Sev13]. **Exposure** [JWHS16]. **express** [Har07]. **expression** [Stu03, Stu07]. **expressions** [LR14, Rom14, SG18, SM04, Stu07]. **extendable** [KVSC21]. **Extended** [CBW+21]. **Extending** [Dar12, DY96a, DY96b, DY99, van95a, van98b, CEI+12, PHH+12]. **extensibility** [Kla99]. **Extensible** [BL97a, BCM21, CFW17, HCPF95]. **Extension** [Ngu08c, BSG+16, WBS21]. **Extensions** [Ano98c, Bea98, Dal01, DPSD08, Ras18]. **Exterior** [BH12]. **Extracting** [HGMC+97]. **extraction** [CGHGRB21]. **Extractive** [VPO19]. **extrinsic** [DMC+15]. **Eyringpy** [DCOC+19]. **EZFF** [KMK+21].

F [Ano00b]. **facilitating** [Spi18]. **FAD.js** [BB17]. **Fall** [MH18]. **FAQ** [Ano98e]. **far** [SDP+20]. **far-field** [SDP+20]. **Faraway** [Lip21]. **Fast** [LV20, Mül13, BB17, SSD+22, Yes15]. **fastcluster** [Mül13]. **Faster** [SN12]. **father** [LS97]. **faults** [MLB22]. **FDTD** [CKK+13]. **feature** [CGHGRB21]. **features** [LR14, Pip15]. **Featuring** [SJM18]. **Feedback** [BE20]. **FEniCS** [LMW12, TT21]. **fenicsR13** [TT21]. **fgivenx** [Han18]. **FIAT** [Kir04]. **Field** [Pat16, Cri18, MFQ+21, OC20, SDP+20, Wie18, WMA+22]. **fields** [CFSK14, Mur18]. **Fifth** [CI96]. **file** [VAP+21]. **files** [KI19, VAP+21, VC18]. **filled** [CBB14]. **Filter** [BHF16]. **Finally** [Aya14]. **Finance** [Vir16, Di 13, Hil15b, Wei15, Wep15, Yan14]. **financial** [Yan14]. **fine** [YHX22]. **fine-grained** [YHX22]. **Finite** [Ano02, LMW12, Ple02, RHM+17, TT21, AM10, KRH18, Kir04, LW10, LWH12, ZMS18]. **FiPy** [GWW09]. **Firedrake** [RHM+17]. **first** [AM21, GL08b, GL09, HRS06, MSW08, Rad06, SL08, Sha03, TSD+12]. **first-class** [TSD+12]. **first-principles** [AM21]. **fit** [GH18]. **fitting** [ENC20]. **fix** [YHX22]. **FL** [Lip21, Lip22]. **Flask** [Gup15]. **Flexibility** [CFMR19, Gar09, PHH+12]. **Flexible** [KB07, BL97b, CSRV13, SAA18]. **Flow** [DB17, HWJ+21, TGEA09, BS21, YHA+16]. **flows** [ML16b]. **Flowtracks** [ML16a]. **fluctuation** [GHKW22]. **Fluent** [Ram15]. **fluid** [CM20, GP22]. **Fluorescence** [RKR21]. **fly** [Cas17]. **fmas** [MD22]. **Follow** [STS+18]. **fondamentales** [Chu07b]. **Force** [OPA+14]. **forcefields** [KMK+21]. **foreign** [LWH+10]. **forensic** [Hos14, O'C13]. **Forensics** [Hos14, Ano14]. **Forests** [PRH17]. **form** [GS12]. **format** [Fas18]. **formats** [VAP+21]. **Formula** [AJJF14]. **Formulation** [Ble20]. **Fortran** [AJJF14, DY99, GH18, GHN19, LC11, MMEH08]. **Fortran-77** [GH18, GHN19]. **forward** [MD22]. **Fotos** [DF00]. **Foundation** [Ngu08c]. **Foundations** [RG10, RG14, You08]. **FPGA** [HWJ+21]. **FPGAs** [AJYH18]. **fracture** [ZL20]. **fragments** [OA17]. **Frames** [HHJCRB21]. **Framework** [HA20, JPOB20, LV20, MMT09, Nor17, Ram18a, RBP+21, Zuk97, AES+22, BCM21, BSG+16, BK19, CM20, DMC+15, FMPS17, FKA+17, GMKRS21, Gar09, GQCP+18, JNN12, JNN13, KVSC21, KSH14, Kuc98b, Law15, LC11, LGS10, LYX+18, Mar17, OMGDG14, RGS+21, SV14, SUM21, SAA18,

SL20, Tay18, VCLS21, WAK22, ZMS18].
frameworks [Dal07, Gup15, MBW07, RCRS06]. **Francis** [Lip21, Lip22]. **Francisco** [ACM92].
Franklin [Jan10]. **Free** [Ano00c, Tro96c, Tro96a, Tro96b, Tro97, CFMR19, HFF⁺17, KBC⁺20, OC20, QZWU19, ZRK21].
Freeway [SYGY21]. **French** [Chu07b, Chu07a]. **friendly** [BCM21, DDK19, GPP⁺21]. **front** [MP19b].
front-ends [MP19b]. **Frontier** [Gue18]. **full** [Pip15, PMM⁺13, Wie18, WMA⁺22].
full-field [Wie18, WMA⁺22]. **Function** [AMPH14, Kor11]. **Functional** [ACM92, Lot15a, MB07, BBH⁺15, Cla15, Han18, Her14, MWK⁺20]. **functionalities** [WMA⁺22]. **functionals** [BT21]. **functions** [BT21, CSRV13, Kir04, May17, MR18].
Fundamental [Chu07b]. **fundamentals** [Chu08, Lee11]. **Funktionen** [Wei06b].
Further [LFT09, She15b]. **fvextra** [Poo16].

Gala [PW17]. **galactic** [PW17]. **Galerkin** [CBLI22]. **Game** [Gut04, Har07, McG07a, RH15]. **Games** [KM15, MWS18, RH15, Swe09, Ull15].
Garbage [GMN21]. **Gas** [Mor17, DCOC⁺19, MFQ⁺21]. **gaseous** [ABGD⁺20]. **Gaussian** [SBMD14]. **Ge** [Wei06b]. **Ge-Packt** [Wei06b]. **Gem** [Bri12a, Bri12b, GF18]. **gem5** [RSRT19].
Gemma [Cas17]. **General** [AJYH18, LS16, AZLY18, Myr15, DBdFdSR21].
General-Purpose [AJYH18, LS16]. **generalized** [MD21]. **Generate** [Bie97, GTC21, ZAPS20]. **Generating** [May21, MFQ⁺21, VAP⁺21]. **Generation** [Ano01b, HAB⁺20, JPOB20, AM10, Dal07, FPSZ21, ML18, OE21, Ras20, RJAL09].
Generator [Bri02, HR20, MO14, NCS17, WZ18, vd91, Hag17]. **genesis** [TV13].
Geneva [IEE97a]. **Genome** [BP17]. **genomic** [GQCP⁺18]. **gentle** [MS13].
Geodesy [Ngu08c]. **geometric** [PBN⁺09]. **geometries** [WAN⁺22]. **geometry** [TEG18]. **Georgia** [USE00]. **Geospatial** [KHD⁺16, Bah15, Law15, Tom15, Wes15, Tom15]. **German** [Lac06]. **gestalten** [DF00]. **Get** [Wil02, CR15, Cox14, SW15].
Getting [BCRS15, Hos12, MAFM21, McG07b, Nai14, Nix15, Ric13]. **GIFT** [SGPHD⁺17]. **GIFT-Grab** [SGPHD⁺17].
GIMP [DF00, DF00]. **GIMP-** [DF00]. **GIS** [Bah15, CC20, Law15, Shi07]. **Glade** [Ano01a, Cha01, Ree04]. **glass** [WMM18].
glasses [BWMS22]. **Glider** [GRKN⁺19]. **GliderTools** [GRKN⁺19]. **Global** [LVH⁺18]. **Globus** [Jac02]. **GLR** [Dej22].
GlusterFS [Dar12]. **GMES** [CKK⁺13]. **gmx2qmmm** [GPP⁺21]. **GNU** [DF00]. **Go** [Ano98d, Ram18b, Dan18b, VCR17].
goniometry [OLRLB21]. **Good** [Bea09a, Pre03, HB16]. **goodness** [GH18].
Google [Pip15, San15]. **GPU** [CFCB17, CWLG⁺21]. **GPUCorrel** [CWLG⁺21]. **GPUs** [AJYH18, CBB14, CCFB16, VY15]. **Grab** [SGPHD⁺17]. **Gradual** [TSD⁺12, Sie17, VKSB15, VSS17]. **Grafik** [Lin06b]. **Grafik-Modul** [Lin06b].
Grafiken [DF00]. **grained** [YHX22]. **Grammar** [MP19b]. **grand** [PHH⁺12].
grand-canonical [PHH⁺12]. **grants** [Bal12]. **Graph** [BSSz⁺20, Hag17, JCY⁺19, LS16, Boe17, GF18]. **Graph-Mining** [LS16].
graph-theoretic [Boe17]. **Graphical** [SJL18, Kar14, MTS⁺18]. **Graphics** [SDS00, GL08b, GL09, PAB⁺97, SML06].
grasp [Lot14a]. **gravitational** [MAC⁺21, Wet20]. **gravitational-wave** [MAC⁺21, Wet20]. **gravity** [MTS⁺18].
Gray [Ish17, Sei09]. **Great** [RAH⁺01]. **green** [ADP21]. **Grids** [MSS⁺19]. **groff** [RAH⁺01]. **GROMACS** [PHH⁺12, GPP⁺21]. **GromPy** [PHH⁺12].
große [Haj08]. **Grounding** [MSS⁺19]. **Group** [Lip21, Lip22, WV22, ZC20].
Grundlagen [DF00]. **GSAS** [TV13].

GSAS-II [TV13]. **GSimPy** [ZC20]. **Gsolve** [MTS⁺18]. **GTK** [DF00]. **GTK-Versionen** [DF00]. **Guest** [Dub07]. **GUI** [Wei06a, Bri02, Con95, Har12, LS98, Sum08, Tal00]. **GUI-Programmierung** [Wei06a]. **Guide** [GRG21, HAB⁺20, HKM08, Lee17, Mit00, BS19, Feh02, Gar09, Ish17, Ish19, ICVG14, KN15, Lob19, Lot15b, Meh15, Mil14, RO15a, RG10, RH15, Sum08, Swe13, Tel06]. **Guided** [LP19, FhDAF09, Ott18]. **Guido** [Chu02b, Dou98, Kuc98a, Sev15a, Sev15b]. **GUIs** [EK08]. **Gumbie** [Bri02]. **gut** [SKS08]. **Gutttag** [Orb18]. **GWpy** [MAC⁺21].

H [HA20]. **H-Revolve** [HA20]. **Hack** [Ott18]. **hackers** [O'C13, Sei09, Sei14]. **Hacking** [Swe13]. **Haddad** [Ano00b]. **Hall** [Lip21]. **Hall/CRC** [Lip21]. **Halloween** [Cas17]. **Hammond** [Ano00a]. **hand** [Buc15]. **Handbook** [Van16, dos01, Hug01, Lip22]. **Handbuch** [EK08, EK09]. **Handle** [GZT⁺18, CBB14, Var16, VC18]. **Handook** [RAH⁺01]. **Hands** [Mil18, Bro06, Cha15, Ros14]. **Hands-On** [Mil18, Bro06, Cha15, Ros14]. **HappyJIT** [HS12]. **Hardback** [Lip21]. **Hardware** [GMN21, JPOB20, Dec04, Tab10]. **harmonic** [GEH19]. **harness** [Lay15]. **Hash** [AMPH14]. **Haskell** [CM07, Pop10]. **Hawaii** [HK95]. **hbk** [Lip22]. **HEART** [LKJC21]. **heat** [SAA18, Zie19b]. **Heatrapy** [SAA18]. **Hector** [ABC97, WHG17]. **Height** [MH18]. **Held** [HTA⁺97]. **Help** [Dör08, HR00, HS13, Law15, Len15]. **Herman** [Cla15]. **Heterogeneous** [BKRT21, HM18, SBC⁺17]. **HexagDLy** [SH19a]. **hexagonally** [SH19a]. **HHVM** [Ott18]. **Hi** [CSZ⁺19]. **Hi-C** [CSZ⁺19]. **Hierarchical** [HA20, Müll13]. **High** [AMGM20, BKRT21, BUS21, Dog15, GO14, Hin02, Hin03, Lew09, LD07, ML16b, OLRLB21, BCRS15, BSS16, BS19, CFÁA⁺20, GQCP⁺18, HF06, Lan13, Mar18, Ros13, Ros14, SNB⁺19, SSH08]. **High-Level** [Hin02, Hin03]. **High-order** [AMGM20]. **High-Performance** [BKRT21, BCRS15, BS19, HF06, Mar18, Ros13, Ros14, SNB⁺19, SSH08]. **High-Productivity** [BUS21]. **High-throughput** [OLRLB21, GQCP⁺18]. **higher** [MO14]. **highlighter** [BC09]. **Hill** [Lak17]. **Hindi** [VPO19]. **histograms** [GH18, GHN19]. **Historic** [TS14]. **Hits** [Sco17]. **hmis** [MB17]. **Holistic** [VFMM08]. **Holographic** [BDF⁺20]. **HoloPy** [BDF⁺20]. **home** [Ste06]. **Homogeneous** [SBC⁺17]. **homotopy** [VY15]. **Hong** [IEE97b]. **Hosmer** [Ano14]. **hot** [OMGDG14]. **hot-reprogramming** [OMGDG14]. **Houches** [Sta19]. **Hour** [Ngu08b]. **HSImage** [BM18]. **HTML** [Bie97, KL97]. **HTML-supporting** [KL97]. **HTML5** [Ada14]. **HTML5-ready** [Ada14]. **HTMLgen** [Ham98]. **Hub** [ZMD21]. **huge** [Cox14]. **Hughes** [Ano00b]. **humanleague** [Smi18]. **HW** [Wu13]. **HW/SW** [Wu13]. **Hybrid** [LP19]. **hydraulic** [ZL20]. **Hydrodynamics** [RBP⁺21]. **hyogen** [SM04]. **Hyperbolic** [LeV09]. **hyperparameters** [FLR22]. **hyperspectral** [BM18]. **HyPhy** [Spi18]. **HYSPLIT** [War18].

i-PI [CMM14]. **IAST** [SSH16]. **Ibrahim** [Ano00b]. **IDE** [Ano01b, SW14]. **Ideal** [SSH16, GP22]. **ideas** [Chu07b, Chu07a]. **identification** [LRPD18]. **IEEE** [CLT20]. **II** [Ang00c, TV13]. **Iisignature** [RG20]. **illustrations** [Lip21, Lip22]. **Image** [Ble20, CWLG⁺21, SLGB14, GRW⁺19, LRPD18, Myr15]. **Images** [ISMA18, OPA⁺14, BM18, TEG18, ZMD21]. **Imaging** [MB07, SBC⁺17, CG17]. **immediately** [Cha15]. **immunoassays** [VCLS21]. **impact** [LJ19]. **Impedance** [LYX⁺18]. **Imperative** [JCY⁺19].

Implement [Mil18, Wei15].
Implementation [BBB02, DD15, JWHS16, Ngu08a, AWO⁺21, ABS20, BISC14, DEMM19, KL97, OA17, Sco17, Tau16].
Implementations [RO15b]. **Implemented** [BHF16, Bra13, Kar14]. **Implementing** [Bri06, EVV12, Nil07b, Zuk97, RNR17].
improve [ZAPS20]. **improved** [Sco17].
improvements [DPSD08, WMA⁺22].
Improving [Ago01, CFMR19]. **impulse** [FRdN21]. **impulseest** [FRdN21]. **In-Code** [VMFG17]. **In-database** [SCAK⁺19, DDK19]. **Included** [Dub07].
includes [Gar09, SML06]. **independent** [PFH⁺16, She97]. **index** [SL21]. **Indicator** [BLE21]. **indispensable** [Buc15]. **Industry** [Joh15, Mat16]. **Infer** [VBB18]. **Inference** [SN12, SBMD14, SMM⁺22, AWO⁺21].
inflationary [MR18]. **inflow** [ML18].
informatics [Sev13]. **information** [Gra18, HGMC⁺97, JEC18, Sev13, YHA⁺16].
Informix [Ano00c]. **Infrastructure** [DDT20]. **Infrastructure-as-Code** [DDT20]. **Inhibiting** [GAS⁺16]. **InitDAE** [SL21]. **Initiation** [Bai08]. **initio** [CMM14].
Injecting [MLB22]. **injection** [WAK22].
inkl [The09]. **input** [FRdN21, VAP⁺21].
inputs [CSR13]. **ins** [DF00, Est01].
insertions [WBS13]. **insightful** [Lay15].
insights [RO15a]. **inspired** [VBM⁺18].
Instant [WMA12]. **Instantiation** [Ano01b].
Instrumentino [KSH14]. **instruments** [KSH14]. **insulators** [BMZ⁺18]. **Integral** [RG20, ŠBA⁺15, CMM14, CFCB17].
integrals [BHJ⁺18]. **integrate** [CV15].
Integrated [GMN21, LFT21]. **integrating** [Bea96, TSC02]. **Integration** [HHJCRB21, Bar22, Dah18c]. **integrations** [Suc13]. **integrators** [MO14]. **integrity** [RS17]. **Intelligence** [Tan06, Lot14b, Seg07].
Intelligent [RM19, ZGL20]. **intensive** [FKA⁺17]. **Inter** [AAC⁺98].
Inter-Language [AAC⁺98]. **interacting** [BG17]. **interaction** [BM18, HHVB21, SH19b]. **interactions** [MMEH08]. **Interactive** [BP17, PG07, RAH⁺01, SDS00, Dan18a, DDK19, GP22, Len15, PAB⁺97, Ros18, Ros13, Ros14, Ull15, Ano00c]. **iteratomic** [DBdFdSR21, KMK⁺21]. **interdisciplinary** [SWD15]. **Interface** [ACM97, DGMP09, SJL18, BLN⁺21, CMM14, DOS17, DMD⁺21, GPP⁺21, Gre18, GTC21, HJPB17, HHP⁺16, Jac02, MTS⁺18, Pit18, PHH⁺12, PWF17, RK19, Spo12, WZ18, WHG17, vdOJP⁺20].
Interfaces [Ano01a, Cha01, LWH⁺10, Smi17, Smi18, Wet20]. **interfacial** [CM20, SHFJ18]. **interferometric** [HJPB17]. **interferometers** [BJR⁺20].
intermetallic [DMC⁺15]. **International** [Ano97c, CI96, IEE97b, IEE97a]. **Internet** [DF00, Joh97, The09, Wei06b, Ano97b, DAJ⁺15, McG98b, Shi07, WvA96]. **Internet-Programmierung** [Wei06b].
interpretation [ZXZX22]. **interpreted** [BKC14]. **Interpreter** [van98b, CM07, PSG12, van95a].
interpreters [HWW⁺15, MD15, ZLBF14].
interstellar [Gre18]. **interval** [SABeh20].
interval-valued [SABeh20]. **Intervals** [PRH17]. **Interviews** [Kuc98a]. **intricacies** [Lot14a]. **intrinsic** [DMC⁺15]. **Introducing** [BC09, GL07a, HRS06, Lub14].
Introduction [Bau96, Dub07, Ful96, Gut13, Gut16, Har12, Has16, Ngu08b, SWD15, SMM⁺22, Tan06, ÜK12, War18, vRD05b, Can14, Joh12, MS13, Poo16, Rad06, Sto13, Sum09, Sum10, vRD03, Orb18].
Introductory [KLM14, KLM15, WX18, LFT09, MBK09, RMZG06]. **Intuitive** [Hug14, KRH18]. **invariant** [LGS10].
invariant-driven [LGS10]. **inventing** [Hos14]. **Investigates** [Ano95].
Investigation [SS13]. **Investment** [GMKRS21]. **invited** [Sie17]. **involving** [SAA18]. **IO** [Buc14]. **IOData** [VAP⁺21].
ion [BFT20]. **ionosphere** [ZRK21]. **IoT** [ZGL20]. **IPython**

[Ber13, PG07, Ros13, Ros14]. **ISBN** [Ano13, Ano14, Ano15a, Ano15b, Cla15, Lee17, Lip21, Lip22]. **isotropic** [Mur18]. **issues** [GMP⁺20]. **Iterated** [RG20]. **Iterated-Integral** [RG20]. **iterative** [BHA18]. **iterators** [ZLBF14]. **Ivezić** [Ish17]. **Izzet** [Ano01a].

J [Ano00b, Ano13, Ish17]. **J.** [Lip21]. **Jacob** [Ish17]. **Jacobian** [NCS17]. **Jacquez** [JWHS16]. **January** [HK95]. **Java** [SML06, SKS08, Ang99, Ano00c, Ano01b, Ano20, ADP21, Dan18a, HF06, Hig03, Hug97, MSR03, Pre03, Rem01b, Roo97, SM04, Stu07, Tro97, Wil05, Zho97]. **Java-Compliant** [Ano01b]. **JavaScript** [Ric14, Dan18a, Gar09, ZMD21]. **JCanvas** [Ano01b]. **JDBC** [Tan01]. **jedem** [Wei06a]. **JeLLyFysh** [HQF⁺20]. **Jesse** [Lee17]. **Jinn** [LWH⁺10]. **JIT** [ABF13, BBH⁺15, BB17, CEI⁺12, HS12, Ott18, PFH⁺16]. **JIT-based** [BB17, PFH⁺16]. **John** [Jan10, Orb18]. **Jose** [Ano97c]. **JPython** [Ang99]. **JSON** [BB17]. **Jug** [Coe17]. **Julia** [BCRS15, BSS16, Bal18, BS19, BCC⁺18, CLMM20, Dan18a, DD15, GMP⁺20, Jos16, KRH18, Lob19, MT18, MT19, MSS⁺19, Nag17, Roh16, Sal18, She15b, SNNB17, ZV19]. **Julian** [Lip21]. **July** [Ano01a, Ass96]. **Jump** [MH18]. **Junction** [SN12]. **June** [ACM92, CLT20, USE96]. **Jupyter** [Bar21, Dan18a, Moo21]. **JupyterLab** [Dan18a]. **Just** [RF16, Wil97a, LJ19, May21, TTS⁺10, WMA12]. **Just-in-time** [RF16, LJ19, TTS⁺10, WMA12]. **Justin** [Ano15a]. **Jython** [PR02, Bri02, Hig03].

Kapitel [Wei06a]. **KDE** [Ano00c]. **Keeping** [Chu02a]. **Keith** [Lip22]. **Kernel** [Ago01, Ano01a]. **key** [BM15, RS17]. **key-based** [RS17]. **keynote** [McK16]. **Kids** [Lin06b]. **Kinder** [Lee17]. **Kinect** [TCE21]. **kinetic** [LWV20]. **KineticPy** [MWM20]. **kinetics** [MWM20, NCS17]. **KinZ** [TCE21].

kisses [Bri12a, Bri12b]. **Kivy** [Ull15]. **Klassen** [Wei06a, Wei06b]. **kMap.py** [BYL⁺21]. **Know** [MAFM21]. **Knowbot** [HMD⁺96]. **Kong** [IEE97b]. **Korner** [Ago01]. **kurz** [SKS08].

L [Har07]. **lab** [Rad06]. **lab-based** [Rad06]. **labeled** [HH17]. **laboratories** [MCGK19]. **Lady** [Bri12a, Bri12b]. **lagrangians** [May21, May21]. **LALSuite** [Wet20]. **landscapes** [MWM20, WM21]. **Lane** [SYGY21]. **Langages** [Bla02]. **Language** [AAC⁺98, Ano95, BKL09, CL06, Ful96, HC16, Het10, Het14, LD07, Lut98a, PFH⁺16, RM19, Rie09, Roo97, Sco09, SS13, Tro96c, ZV19, van98a, vRD05a, AJJF14, BCRS15, BS19, BBH⁺15, Bor07, CLM05, Can14, CEI⁺12, CGK11, Dec04, DY96a, Fee16, GMP⁺20, HWW⁺15, IOC⁺12, KRH18, LS97, LWH⁺10, LGS10, MR07, Nel15, Ngu08d, Och09, Ori97, Per14b, SL08, SNB⁺19, She97, Sum09, Sum10, vd91]. **Language-independent** [PFH⁺16]. **Languages** [Ano98d, Dör08, ESM98, Pre00, Pre03, Bea96, BL97b, BDT13, BKC14, Cas20, CEI⁺12, DTM⁺18, FhDAF09, GLS⁺10, HPH12, LS97, Mau02, MRG18, Ngu08e, OMGDG14, RF16, Wu13, YPB16]. **Large** [vdOJP⁺20, BL97b, BCG05, Var16]. **Large-Eddy** [vdOJP⁺20]. **large-scale** [BL97b]. **laser** [EBNS22]. **Lasso** [HHJCRB21]. **LAST** [Sco17]. **latest** [Cas20]. **Lattice** [DBdFdSR21, Mor17]. **Lattice-Gas** [Mor17]. **lattice_mc** [Mor17]. **Laughs** [Wil97a]. **layers** [CBB14]. **Lazily** [Har15]. **LazySorted** [Har15]. **Learn** [Cha15, Don14, Ros13, CV15, HS13, Idr14, Mad15, Nai14, Sal18, Swe09, ZKB⁺08]. **Learned** [Wit21]. **Learning** [Ada14, AVS20, Arb14, BW14, Dan18a, Duf15, Gun14, Hia15, Hill15a, Hil20, Hug99, JCY⁺19, LV20, Lay15, Len15, LA99, LA04, Lut08, Lut09a, Lut09b, Lut13, MH15, RM19, Ros13, SW15, BSS16, BCM21, Bow15, CR15, GMP⁺20,

Har07, Ish17, ICVG14, Kar14, RS17, RO15a, Ras18, Sal18, SCAK⁺19, WRBT21, Lak17]. **learning-assisted** [WRBT21]. **LEED** [GDP18]. **LEEM** [GDP18]. **Lefever** [MD21]. **LegacyJ** [Ano01b]. **Legate** [BLP⁺21]. **LEGOs** [BMK03]. **Leitfaden** [Haj08]. **lets** [Cas17]. **Letter** [Gar98]. **Letters** [RAH⁺01]. **Level** [Hin02, Hin03, LFT21, Myr15]. **leverage** [BSS16, LR14, SW14]. **Libraries** [MLGW18, Bah15, Hig03, She97, Wes15, Wet20]. **Library** [AMGM20, BTR14, CHG⁺16, CR12, HC16, HAGH18, ISMA18, LS16, Lun01, Moo21, RG20, AM19, Ada14, BG17, BB22, BM18, Cri18, DM20, FPSZ21, Gre16, HJHZ18, HTH⁺20, HU17, HBA⁺20, HB16, JAGP14, KL97, KMK⁺21, LRPD18, LRvE17, LWH12, May17, MMP11, MK16, DDT20, PBN⁺09, Ras20, RV20, RJAL09, RC18, SLDF⁺21, SH17, Ull15, VAP⁺21, WAN⁺22, Yes15, ZMS18, Zie19b, van95b, BLE21]. **Life** [Has16, Yan14]. **lightweight** [Bah15, CBLI22, Gar09, RGS⁺21]. **Like** [Dow15, Dow09, SG18]. **Line** [CC20, IG19, Har07, Har07]. **Linear** [SBMD14, TT21, BCG05, CFSK14, Dah18b, LKJC21, RV20, Lip21]. **linear-operator** [RV20]. **Lines** [HAB⁺20]. **linguistics** [Joh08]. **Linking** [vd91]. **Linux** [Ano00b, DF00, Ric14, USE00, Ago01, Ano00b, Ano00c, Bla02, Bla04, GJ08, Lac06, MS⁺00, Par11, RAH⁺01, TSC02]. **Linux-basierte** [Ric14]. **LIon** [BFT20]. **lipid** [WRBT21]. **Lisp** [ACM92, Mac91, Mac92a, Mac92b]. **List** [Har15]. **lists** [Ano20]. **little** [VSS17]. **LJ** [Kuc98a, RAH⁺01]. **LLNL** [Ano98c]. **LLNL-Distributed** [Ano98c]. **LLVM** [RSRT19]. **LLVM-Based** [RSRT19]. **Local** [LFT21]. **Log** [RG20]. **logic** [Bro06]. **long** [MWM20]. **long-time** [MWM20]. **Loop** [ABF13, LS17, RCAE⁺20]. **Loop-aware** [ABF13]. **Loosa** [RAH⁺01]. **Lorentz** [FH22]. **Love** [Wit21]. **Low** [GDP18, ZAPS20]. **low-dimensional** [ZAPS20]. **Low-energy** [GDP18]. **lower** [ZRK21]. **LR** [Dej22]. **LR/GLR** [Dej22]. **LSPR** [CFCB17]. **Lua** [Gut04]. **Lugiato** [MD21]. **luminescence** [TR22]. **Lunch** [Ang00a]. **Lutz** [Ano97a]. **M** [Jan10, Lee17, Wep15]. **Mac** [SML06, Wal07]. **Machine** [Bow15, CFW17, CR15, GMP⁺20, Ish17, ICVG14, Kar14, MRG18, RS17, RO15a, Ras18, Sal18, SCAK⁺19, WRBT21]. **machines** [MRG17, PFH⁺16]. **Made** [RG00, AW06, Cox14]. **magcoilcalc** [MFQ⁺21]. **MAGICC** [GWM18]. **magnet** [MFQ⁺21]. **Magnetic** [MB07, CFW17, HHVB21, MFQ⁺21, OC20]. **Magni** [OPA⁺14]. **Magpylib** [OC20]. **maintaining** [RS17]. **major** [WMA⁺22]. **majors** [Guz03, HHK⁺09]. **make** [Mad15]. **makes** [Kla99]. **Making** [Dal01, DDK19, Swe09]. **manage** [RC18]. **Management** [Ano97d, Ano00c, BBB02, IG19, KDC⁺18, ML16a, AW06, Hos12, JAGP14]. **Managing** [Por03, PMBF17]. **Manifolds** [HAGH18, ZAPS20]. **manipulate** [GZT⁺18]. **Manipulation** [Mil18]. **ManPy** [DPH16]. **Manual** [DF00, van98c, vRD05a, Mac91, Mac92a, van95c, HYG16]. **manufacturing** [DPH16]. **many** [Gra18]. **many-body** [Gra18]. **Maple** [GS12]. **mapped** [Fas18]. **mapping** [GRW⁺19, HK15, Tom15, WM21]. **maps** [Gre18]. **March** [HTA⁺97]. **Marginalization** [SN12]. **Mark** [Ano97a, Ano00a]. **Markdown** [XDR21, LKJC21]. **Marketing** [Mil15]. **Mass** [SN12, Ras20, Wha18]. **massively** [BSG⁺16, Mos20a]. **master** [Ada14, Meh15, Pip15, Zac15]. **Mastering** [Dog15, Het14, Kas15, LR14, Lot14a, Mad15, Meh15, Rom14, She15b, Wei15, BJ14a, Het10, Tid07]. **Matching** [KDC⁺18, KB18].

MatchingTools [Cri18]. **MatchPy** [KB18]. **material** [SNNB17]. **materials** [PSGL21, SLDF⁺21, WM21]. **Math** [Ano15b, Sah15]. **Mathematica** [Sta19]. **Mathematical** [SdSS16, Wei15]. **Mathematics** [LL08]. **MATLAB** [MSS⁺19, CLMM20, TCE21]. **Matplotlib** [RC18, Tos09, Nel15]. **Matrices** [FSZD20, Wim12, FM16]. **matrix** [HJHZ18, SH17]. **matter** [May21, Sch21]. **maximum** [SR19]. **Maxwell** [CKK⁺13]. **May** [Ano97d, Ano01a, Eur91]. **Maya** [Gal14]. **Maybe** [How06]. **McNulty** [Lip22]. **MCycle** [Hug18]. **measurements** [MTS⁺18]. **Measuring** [ÅW16, KCS11, DDT20, ZC20]. **mechanical** [SLDF⁺21]. **Mechanics** [Ble20, BWMS22, MS15, GPP⁺21]. **mechanics/Gromacs** [GPP⁺21]. **mechanochemical** [DyH21]. **MechElastic** [SLDF⁺21]. **media** [BVV22, Guz03]. **Mediator** [Far02]. **Mediator/Python** [Far02]. **Medical** [ISMA18, SBC⁺17, SML06]. **medium** [LRvE17]. **medium-sized** [LRvE17]. **Meep** [LFN⁺11]. **membranes** [WRBT21]. **memory** [Fas18, SSH08, Tab10]. **memory-mapped** [Fas18]. **mental** [SG07]. **Merging** [SYGY21]. **mesh** [GS12, HR20]. **message** [BL97a]. **Meta** [Tro96b, MD15]. **meta-compilation** [MD15]. **metagraphs** [RNR17]. **Method** [HFB21, LMW12, RHM⁺17, BE20, CKK⁺13, DEMM19, SNNB17]. **Methodologists** [Dör08]. **Methods** [Gez20, LT03, MS07, Nor17, AES⁺22, AM10, GF18, KRH18, Kiu10, Kiu13, VCLS21, You08]. **metrics** [Gre16]. **MF DFA** [GHKW22]. **MGRIT** [HFB21]. **MGtoolkit** [RNR17]. **microcontrollers** [Ano19]. **microframework** [VBM⁺18]. **Microscopy** [BDF⁺20, OPA⁺14]. **MicroStructPy** [HR20]. **microstructure** [HR20]. **microsynthesis** [Smi18]. **mics** [BLE21]. **mics-library** [BLE21]. **migration** [Fee16]. **migrations** [Lot15b]. **Milestone** [SV14]. **minimal** [May21]. **minimal-lagrangians** [May21]. **Mining** [LS16, sR11, Rus14, YHX22, Ish17, ICVG14, Lay15]. **Minkowski** [BT21]. **Minneapolis** [HTA⁺97]. **Minolta** [Ano00c]. **Misconception** [RAH⁺01]. **Mitch** [Ano01a]. **Mitchell** [Mit00]. **Mix** [Est01]. **Mix-ins** [Est01]. **Mixed** [TT21]. **MLLPA** [WRBT21]. **MLxtend** [Ras18]. **mmappickle** [Fas18]. **MN** [HTA⁺97]. **MO** [Cas17]. **mob** [CS21]. **Mobile** [ST⁺07, CS21, HMD⁺96, Len15]. **Mode** [CR12, DTR18]. **Model** [BTR14, CFMR19, War18, ABS20, GWM18, Hen08, May21, RBV16, WHG17, Bie21]. **Model-based** [CFMR19]. **Modelica** [Ern99]. **Modeling** [Ano01b, AJH⁺12, DDMS14, ISMA18, JPOB20, KB07, Lip22, Mil14, RSRT19, Tie16, YH21, ZV19, BK19, BMZ⁺18, GG21, HHM18, HCPF95, KN15, Mar17, MFQ⁺21, Mil15, PSGL21, Ros18, WMM18, Lee17, Ish19]. **Modelling** [PHF10, BVV22, BJR⁺20, LFT21, PBN⁺09, Tay18]. **Models** [HM18, Lip21, SBMD14, ZV19, DPH16, Kar14, KVSC21, Lay15, MD22, SG07]. **Modern** [Sev15b, AJJF14, Lub14, MS15, Mit15, TV13]. **moderne** [LAG07]. **modernize** [Lot15b]. **modified** [KSS20]. **modify** [Kno08]. **modred** [BTR14]. **Modul** [Lin06b]. **Modular** [CFW17, HYG16, BST⁺17, HPT⁺16, KSH14]. **Modularisierung** [EK08]. **Module** [Ham98, KB07, MD17, Mor17, SBMD14, TGEA09, Wei06b, BS21, CGHGRB21, CWM⁺21, DyH21, Fas18, MCGK19, PHH⁺12, Tom15, WRBT21]. **modules** [Idr14]. **moisture** [MPMC21]. **molecular** [CMM14, DFC18, DPF⁺21, FC17, HCPF95, KMK⁺21, LHH⁺21, SHFJ18, SSD⁺22, Yes15]. **moment** [SR19]. **Monograph** [Anoxxx]. **Monte** [ABGD⁺20, DMD⁺21, DEMM19, HQF⁺20,

Mor17, Nil07b, PHH⁺12, WAN⁺22].
MontePython [Nil07b]. **Monterey** [Ass96].
monty [PMM⁺13]. **Moodle** [Rad08].
MoSDeF [DMD⁺21]. **most** [Cox14, LR14].
moving [FH22]. **MPI**
 [DPS05, DPSD08, DFSW19]. **MPI-2**
 [DPSD08]. **MPI-parallelized** [DFSW19].
mpi4py [DF21]. **mpnum** [SH17]. **Multi**
 [EVV12, GMS17, MLGW18, Och09, Pul00,
 BHJ⁺18, Fee16, KMK⁺21, LRPD18,
 MTPHH18, QZWU19, SUM21, SGPHD⁺17].
Multi-Agent [EVV12]. **multi-channel**
 [SGPHD⁺17]. **multi-configuration**
 [QZWU19]. **multi-energy** [SUM21].
multi-image [LRPD18]. **Multi-language**
 [Och09, Fee16]. **multi-objective** [KMK⁺21].
Multi-Processing [MLGW18].
Multi-Robot [GMS17]. **multi-scale**
 [BHJ⁺18]. **Multi-Threaded** [Pul00].
Multi-Threading [MLGW18]. **Multiclass**
 [HJHZ18]. **Multicomplex** [AMGM20].
multidimensional [Bar22].
Multidisciplinary [MMT09, HHK⁺09].
Multidual [AMGM20]. **MultiFLEXX**
 [MTPHH18]. **multiflexlib** [MTPHH18].
multifractal [GHKW22]. **multigrid**
 [BISC14]. **Multilane** [SYGY21].
multilayered [BVV22]. **multimedia**
 [GFB⁺14]. **multimodal** [AES⁺22, SL20].
multiphysics [BSG⁺16]. **Multiple**
 [Kor11, MP19b, BLE21].
Multiple-Precision [Kor11]. **Multiscale**
 [LWV20]. **Multithreaded** [MAG21].
multithreading [Swi09]. **multivariate**
 [ASAA20, CSR13]. **MultiZ** [AMGM20].
munuSSM [Bie21]. **music** [MBK09].
Musterlösungen [Wei06a]. **MVTS**
 [ASAA20]. **MVTS-Data** [ASAA20]. **MWA**
 [HYG16]. **MyHDL** [Dec04]. **Myro** [Men09].
MySQL [Bis01, HF06, TSC02]. **Mython**
 [Rie09].
Names [RAH⁺01, Sta17]. **nano** [WMA⁺22].
nano-optics [WMA⁺22]. **NanoNET**
 [KVSC21]. **nanoparticle** [WAK22].
Nanophotonics [BVB⁺07].
nanostuctures [Wie18]. **Nansat**
 [KHD⁺16]. **Natter** [SLGB14]. **Natural**
 [BKL09, DD15, RM19, SLGB14, Per14b].
nature [VBM⁺18]. **nature-inspired**
 [VBM⁺18]. **Ncpol2sdpa** [Wit15]. **need**
 [Cha15]. **Nelson** [Lee17]. **Neo4j** [Gup15].
Neper2CAE [GTC21]. **NESSie.jl**
 [KRH18]. **Nest** [Dub05]. **Nested** [BFM18].
nests [RCAE⁺20]. **Net** [Bis01]. **NetLogo**
 [GG21]. **Network** [Ago01, Ano00c, BBB02,
 GRG21, LS16, Ngu08a, SYGY21, XL18,
 AW06, CC20, FL06, GL07a, Gre16, HK15,
 RG10, RG14, Sar14, SW15, WZ18].
Networks [KSB12, SJK⁺21, VBB18, BS21,
 Boe17, BB22, FLR22].
Netzwerkcommunication [EK08]. **Neural**
 [FLR22, SJK⁺21, BB22]. **neurophysiology**
 [NMGB17]. **Neuropsydia.py** [MD17].
NeuTomPy [MMG19]. **neutron**
 [MTPHH18]. **neutrosophic** [SABEh20].
NeuVis [Ano01b]. **New-Style-Klassen**
 [Wei06b]. **News**
 [HPT⁺16, LRvE17, PHH⁺12, She15a, Yes15].
Next [Dal07]. **Next-generation** [Dal07].
NiaPy [VBM⁺18]. **NiceProp** [GP22].
NIST [Ano95]. **NJ** [Lee17]. **NL4Py**
 [GG21]. **NLKT** [Per14b]. **NLTK** [Per14b].
No [Ano15a, Ano15b, Wat95]. **NOAA**
 [War18]. **noble** [MFQ⁺21]. **noisy** [May17].
Noisyopt [May17]. **nomisweb** [Smi17]. **non**
 [Dah18b, FRdN21, GP22, GEH19, Guz03,
 ZRK21]. **non-auroral** [ZRK21]. **non-ideal**
 [GP22]. **non-linear** [Dah18b]. **non-majors**
 [Guz03]. **non-parametric** [FRdN21].
non-uniformly [GEH19]. **Noncommuting**
 [Wit15]. **Nonlinear** [MS07, MMP11].
nonlocal [KRH18]. **nonsense** [Huc18].
normalization [SABEh20]. **Norway**
 [Eur91]. **Nostril** [Huc18]. **Notation** [TS14].
Notions [Chu07b, Chu07a]. **Novice**
 [Sma12, Het05, Het08, McG07a].
noWorkflow [PMBF17]. **nuclear** [WZ18].

Numbers [AMGM20]. **Numeric** [MLGW18]. **Numerical** [Bar22, BT06, DHH96, Gez20, HM18, Joh15, Kiu10, Kiu13, LT03, Ram18a, Wim12, BHJ⁺18, Bra13, Dah18c, DFSW19, MS15, ML16b, Ros13, Ros14, WAK22, Mat16]. **numerically** [Dah18b]. **NumPy** [AJJF14, DOS17, Mil18, RC18, Fas18]. **NURBS** [BK19]. **NURBS-Python** [BK19]. **nutshell** [Mar03, Mar06].

Object [CI96, DY96a, ESM98, GL08a, HAGH18, Lut98a, Lut01, MMT09, USE96, AM19, BK19, GL07b, GL08c, HPH12, HHP⁺16, Kak08, KCS11, Lot14a, Phi10, Phi15, SML06, She97, YFD98]. **Object-Orientation** [CI96]. **Object-Oriented** [ESM98, HAGH18, Lut01, MMT09, USE96, DY96a, GL08a, AM19, BK19, GL07b, GL08c, HPH12, Kak08, Lot14a, Phi15, SML06, YFD98]. **objective** [KMK⁺21]. **Objects** [ABC97, She97, Kak08, Phi15]. **Objekte** [Wei06a]. **objektorientierte** [Wei06b, Wei06a, Wei09]. **objektorientierter** [The09]. **Objektorientierung** [EK08]. **objet** [Swi09]. **observations** [Pop10]. **obtaining** [DBdFdSR21]. **O'Connor** [Ano13]. **Octave** [Wet20]. **October** [ACM97, Ano97c, CI96, USE00]. **ODE** [Dah18c]. **Offended** [RAH⁺01]. **Offline** [GAS⁺16]. **Ogg** [RAH⁺01]. **On-Ramp** [SYGY21]. **One** [GS12, Ngu08b, Pat16, Cha15, Ros08]. **One-Dimensional** [Pat16]. **One-Hour** [Ngu08b]. **One-peak** [GS12]. **online** [JAGP14]. **only** [Cha15, KI19]. **OO** [LAG07]. **OO-Programmierung** [LAG07]. **OOP** [She97]. **Open** [Eur91, HYG16, JPOB20, JČMG11, Ray98, Bah15, BK19, BLN⁺21, CFW17, CG17, CBLI22, DPH16, FH22, GMP⁺20, HU17, Idr14, JNN12, JNN13, KPK⁺17, KSH14, MDRN18, PSGL21, SV14, TV13, Ull15, VSS17, You08, ZRK21, LFN⁺11, Len15]. **Open-CV** [Len15]. **Open-Source** [HYG16, JPOB20, BK19, BLN⁺21, CFW17, CG17, CBLI22, DPH16, FH22, HU17, JNN12, KPK⁺17, KSH14, MDRN18, PSGL21, TV13]. **open-world** [VSS17]. **OpenCL** [Di 14]. **OpenCV** [Jos15, MH15]. **OpenMechanochem** [DyH21]. **OpenMG** [BISC14]. **OpenMoist** [MPMC21]. **OpenSees** [ZMS18]. **OpenSeesPy** [ZMS18]. **OpenStreetMap** [Boe17]. **Operating** [CI96, Mos20b]. **operations** [SABEh20]. **operator** [RV20]. **opt_einsum** [SG18]. **optical** [BJR⁺20, MD22]. **optics** [WMA⁺22]. **optimisation** [SUM21]. **optimisation-based** [SUM21]. **Optimization** [CFMR19, HAGH18, JG17, MMT09, Mir18, SdSS16, Wit15, AES⁺22, GLS⁺10, MFQ⁺21, RV20, Rie09, Wie18]. **optimizations** [ABF13, BB17]. **Optimized** [LH20]. **Optimizing** [FSZD20, RKVL14, BB22, FLR22, HWW⁺15, LJ19, MD15, May17, SG18, ZLBF14]. **options** [LS98]. **OPUS** [MSR03]. **Oracle** [Ano00c]. **ORBKIT** [HPT⁺16]. **order** [AMGM20, Lot14a, MO14, SG18]. **Ordering** [Ang00a]. **Oregon** [CLT20]. **O'Reilly** [Ano97a, Ano00a]. **Orientated** [KHD⁺16]. **Orientation** [CI96]. **Oriented** [ESM98, HAGH18, Lut98a, Lut01, MMT09, USE96, AM19, BK19, DY96a, GL07b, GL08a, GL08c, HPH12, HHP⁺16, Kak08, KCS11, Lot14a, Phi10, Phi15, Ros18, SML06, YFD98]. **OS/2** [DF00]. **oscillators** [FH22]. **OSMnx** [Boe17]. **Other** [Wil00, Hos12]. **Our** [Cas20]. **Outcomes** [WX18]. **output** [FRdN21]. **overhead** [ZXZX22]. **overview** [LS98]. **own** [Nai14, RH15, SML06]. **oxide** [BWMS22]. **P2NMAP** [HK15]. **PaCAL** [KJ14]. **Pacific** [HK95, IEE97b]. **pack** [Rad08]. **Package** [AVS20, DB17, HFB21, IG19, KHD⁺16, KJ14, LVH⁺18, ML16a, MWS18, OPA⁺14, SdSS16,

XMW10, XL18, YH21, ASAA20, AME⁺²¹, BFT20, Bie21, BLE21, Boe17, BE20, BHA18, BJR⁺²⁰, CFSK14, CG17, CKK⁺¹³, Dah18a, DFC18, DPF⁺²¹, DFSW19, EBNS22, FH22, FRdN21, FC17, GRW⁺¹⁹, GdGB⁺¹⁸, Gir21, GL08b, GL09, GF18, Gra18, Han18, HHVB21, HHM18, Hug18, JEC18, KPK⁺¹⁷, LHH⁺²¹, MWK⁺²⁰, MAC⁺²¹, MD22, MTPHH18, MFQ⁺²¹, MMG19, Mos20a, ML18, MR18, Mur18, NMGB17, NEGZG18, OC20, PW17, QZWU19, RG18, RNR17, SHFJ18, SSH16, Smi18, SG18, Spi18, Sta17, TS20, TR22, TV13, Var16, VC18, Wha18, WO14, ZTC⁺²¹, ZC20, ZRK21]. **Packages** [BUS21, Mil18, Lub14, ZMD21]. **Packt** [Wei06b]. **Pages** [Ang00b, Ang00c, Bie97, Ano97a, Ano00a, Mit00]. **palette** [TEG18]. **palette-based** [TEG18]. **Palm** [Ano00c, Ano00c]. **Pandas** [Mil18, Nel15]. **paper** [Lee17, MDRN18]. **Papers** [Anoxxa, Anoxxb, Anoxxc, Anoxxd, ACM92]. **paradigm** [Kir04]. **Parallel** [BT06, CBW⁺²¹, Coe17, Di 14, DGMP09, HFB21, HTA⁺⁹⁷, Hin03, Hin07, IEE97a, MAG21, MRG17, Pal14, Sah12, TBA⁺¹⁷, BSG⁺¹⁶, CLM05, CGK11, GFB⁺¹⁴, HLSØ06, MRG18, PWF17, Yes15, Zac15, MMP11]. **Parallel-in-time** [HFB21]. **parallelisation** [RCAE⁺²⁰]. **Parallelism** [BUS21, HBS⁺²⁰]. **parallelizable** [GG21]. **Parallelization** [DTM⁺¹⁸, MAC14]. **Parallelized** [BTR14, CWM⁺²¹, DFSW19]. **Parallelizing** [CL06]. **parameter** [LWV20]. **parameterization** [KMK⁺²¹]. **parameters** [DBdFdSR21, HHVB21, LJ19, RKVL14]. **parametric** [FRdN21]. **ParamGULP** [DBdFdSR21]. **Parglare** [Dej22]. **Parquet** [KI19]. **parser** [Dej22]. **parsing** [Spi18]. **Parsl** [CBW⁺²¹]. **Part** [Ang00b, Bri12a, Bri12b, Ang00c]. **Partial** [BT06, GWW09, LT03, MSL⁺⁰⁷, MD15]. **Partially** [Har15]. **Particle** [Hug14, ML16a, Mir18, Nor17, RBP⁺²¹, May21, RKVL14]. **Particle-Based** [Nor17]. **particle-in-cell** [RKVL14]. **Passages** [Gro20]. **passing** [BL97a]. **Passive** [HK15, JM20]. **Password** [GAS⁺¹⁶]. **PASTA** [KBLJ18]. **path** [AZLY18, BSS16, CMM14]. **path-based** [AZLY18]. **Pattern** [KB18]. **Patterns** [VCR17, Chr02, Kas15, YHX22]. **PC** [Wal07, Ano00c]. **PCA** [ZAPS20]. **PCA-derived** [ZAPS20]. **PCafold** [ZAPS20]. **PDE** [CL06]. **PDF** [DF00]. **PDF-Dateien** [DF00]. **peak** [GS12]. **Penetration** [Duf15, Buc15, Moh15, O'C13]. **pentesters** [Sei14]. **Penultimate** [RAH⁺⁰¹]. **People** [Lip22]. **peptide** [WBS21]. **perceptions** [SL08]. **Perfectly** [Sch17]. **Performance** [BKRT21, DPSD08, Dog15, FSZD20, LH20, LLL⁺²⁰, LD07, SdSS16, TS14, BCRS15, BSS16, BS19, BCC⁺¹⁸, CLM05, CFÁA⁺²⁰, GO14, HF06, IOC⁺¹², Lan13, Lew09, LJ19, Mar18, ML16b, Ros13, Ros14, SNB⁺¹⁹, SSH08]. **performing** [BSS16]. **Perl** [DF00, SKS08, Bla02, Bla04, HAE00, HF06, Kak08, LS97, MSR03, Ngu08d, Ngu08e, Pre03, Roo97, Sit02, SM04, Stu07]. **Perprof** [SdSS16]. **Perprof-py** [SdSS16]. **Persistence** [Ano01b]. **Perspective** [Eur91, KDC⁺¹⁸, GRW⁺¹⁹, Wep15]. **Perusing** [Wil97b]. **Petascale** [Wit21]. **Pfaffian** [Wim12]. **pGrAdd** [WV22]. **phantoms** [CG17]. **Pharo** [ADP21]. **phase** [CM20, DCOC⁺¹⁹, WRBT21]. **phase-specific** [WRBT21]. **Phasepy** [CM20]. **phenology** [Tay18]. **Phil** [Ano00b]. **Philip** [Lee17]. **photoemission** [BYL⁺²¹, SL20]. **Photophysiology** [RKR21]. **PHP** [SKS08, HF06, HS12, Ott18, SM04, Stu07, TTS⁺¹⁰]. **phrasebook** [Day07b]. **Phylogemetric** [Gre16]. **phylogenetic** [Gre16]. **phyphy** [Spi18]. **Physical** [Ano21, Lee17, Tie16, Ish19, KN15, RKVL14, WAN⁺²²]. **Physics** [Aya14, Bäck07, Gez20, MAFM21, BLN⁺²¹, Bor07, Di 13, EBNS22, MCGK19, RGS⁺²¹, RSPJ21, San13, SSD⁺²², Wep15].

Phytoplankton [RKR21]. **PI** [CMM14, BW14, Cox14, Don14, MAFM21, Nix15]. **Piano** [TS14]. **pickle** [Fas18]. **Pierro** [Wep15]. **PII** [DPF⁺21]. **Pipeline** [MSR03]. **pipelines** [WAK22]. **pitfalls** [CEI⁺12]. **plan** [Lot15b]. **planar** [ZL20]. **planetary** [LRPD18]. **planning** [LFT21]. **planning-level** [LFT21]. **plant** [PBN⁺09, Tay18]. **PlantGL** [PBN⁺09]. **plasma** [SSD⁺22]. **Platform** [Ano00c, BBB02, Lac06, SBC⁺17, TT21, BLN⁺21, HPT⁺16, MDRN18, PSGL21, ST⁺07, She97, Ull15, Lac06]. **platform-independent** [She97]. **Platforms** [HA20, GFB⁺14, Par11]. **Playing** [Swe09]. **PLEASE** [GDP18]. **plots** [Tos09]. **Plotting** [OZW18, Han18, HFF⁺17, JM20]. **Plug** [DF00]. **Plug-ins** [DF00]. **Plus** [BUS21]. **PLW** [LD07]. **PmlBeta** [WBS21]. **pMuTT** [LWV20]. **Pocket** [Lut98b, Lut02, Lob19, Lut05, Lut14, Stu03, Stu07]. **POGIL** [HS13]. **point** [AM21, BMZ⁺18, DMC⁺15, FH22, SNNB17]. **Poisson** [Bra13]. **polarizers** [MFQ⁺21]. **Political** [Dör08]. **pollution** [RC18]. **polycrystals** [GTC21]. **Polyhedral** [LP19]. **Polymorphie** [Wei06a]. **polymorphism** [ÅW16]. **Polynomial** [VY15, Wit15]. **pools** [PWFM17]. **popular** [Idr14]. **Portable** [Di 14, Kor11, Bah15]. **Portland** [CLT20]. **ports** [Buc14]. **posets** [GS12]. **positive** [GS12]. **Post** [AM21, SJL18]. **Post-processing** [AM21, HTH⁺20]. **Post-treatment** [SJL18]. **Posterior** [FV18, Han18]. **postprocessing** [HPT⁺16]. **potential** [ABS20, Cox14, DBdFdSR21, Hia15]. **Power** [BHS18, Day14, BSS16, Gal14, Hug18, Lay15, MH15, Mur18, Phi15, SW14, SUM21, Tel06]. **powerbox** [Mur18]. **powered** [RDS07]. **powerful** [Idr14, Law15, Lot14a, Zac15]. **pp** [Lee17, Lip21, Lip22]. **Practical** [Ben08, Cue13, Gal14, Het02, Joh15, Mat16, CR15, DAJ⁺15, Fla08, Ish17, ICVG14, Per14b, Swe14]. **Practice** [TS14]. **practices** [ZKB⁺08]. **practitioner** [BM15]. **pragmatic** [RH15]. **Pragmatics** [Sco09]. **praktisch** [Wei06a]. **practical** [Sar14]. **Praxis** [EK08]. **Praxisbuch** [Haj08]. **pre** [HTH⁺20]. **pre/post** [HTH⁺20]. **pre/post-processing** [HTH⁺20]. **Precise** [YHA⁺16]. **Precision** [Kor11, LV20, BJR⁺20]. **predicting** [AZLY18, Zie19b]. **Prediction** [HBA⁺20, BWMS22]. **predictive** [Bow15, Lay15, Mil14, Mil15, RO15a]. **preferences** [DMC⁺15]. **PREMER** [VBB18]. **preparation** [EPM09]. **preprocessing** [ASAA20]. **presentation** [Kak08]. **presented** [ACM92]. **Preserving** [IG19]. **Press** [Ano15a, Ano15b, Cla15, Gve09, Lip22]. **Presses** [Ray98]. **Price** [Lee17]. **Prime** [Ano98d]. **primer** [Lan09, Lan11, Lan12]. **Princeton** [Lee17]. **principles** [AM21, LHB14]. **print** [Ano14]. **prisms** [LDAL20]. **Pro** [Alc09, BA14, Sil14]. **probabalistic** [Kar14]. **Probabilistic** [LP19, RBV16]. **Probabilities** [Pat16]. **Problem** [Bar21, Mis19]. **Problem-Solving** [Bar21]. **Problems** [AVS20, Ble20, DB17, LeV09, ŠBA⁺15, Wit15, Kar14, She15b, Wil05]. **ProbLog** [FLR22]. **ProbLog-based** [FLR22]. **procedure** [HF06]. **Proceedings** [ACM92, ACM97, Ano97c, Ano97d, CI96, ESM98, Eur91, HTA⁺97, IEE97b, IEE97a, USE96, USE00, CLT20]. **process** [Ros18, Wes15]. **process-oriented** [Ros18]. **processes** [SAA18]. **Processing** [APS10, BKL09, Ble20, GRKN⁺19, HTA⁺97, Hug14, IEE97a, KHD⁺16, MLGW18, Mil18, RM19, RKR21, SBC⁺17, SH19a, AM21, BST⁺17, HTH⁺20, How98, McG00, Mer03, MMG19, Myr15, Per14b, PWFM17, SGPHD⁺17, She15b]. **processor** [Tab10]. **product** [SH17]. **production** [ZTC⁺21]. **Productive** [CBW⁺21]. **Productivity**

[Ano01b, BUS21, Moo21]. **Products** [Ano00c, Ano01b]. **Professional** [MS⁺00, MBW07, Het05, Het08, McG07a]. **professionellen** [DF00]. **Profi** [Haj08]. **Profi-Leitfaden** [Haj08]. **Profile** [Ano19, FhDAF09, SdSS16, Ott18]. **Profile-guided** [FhDAF09, Ott18]. **Program** [DDLW02, AZLY18, BYL⁺21, DEMM19, DCOC⁺19, HS13, Len15, MTS⁺18, Swe09, DBdFdSR21]. **Programmable** [OA17]. **Programmanfänger** [The09]. **Programmation** [Zia06, Bai08, Swi09]. **Programmbeispiele** [Lin06b]. **Programmer** [Ang99, Ano00b, McG98c, Wil97b, Wil00, Wil01, Wil02, Swi09]. **Programmierung** [Lin06a]. **Programmiers** [HR00, Ros08, Sma12, Cox14, Meh15]. **Programmierer** [Haj08]. **Programmierung** [EK08, LAG07, The09, Wei06a, Wei06b, Wei09]. **Programming** [ACM92, Ano95, Ano97b, Ano00b, Bal18, CL06, CBW⁺21, DY96b, DY99, Ful96, Gar98, Gra00, Gut13, Gut16, HR00, HC16, Hin02, HWJ⁺21, HMD⁺96, Joh97, KLM14, KLM15, LT03, Lut96, Lut01, Lut06, MAG21, McG98b, McK16, MSS⁺19, Nag17, Orb18, Pet02, Pre00, RG00, Roo98, San15, SDS00, Sco09, Seg07, SNNB17, SS13, Sum09, Sum10, Tro96a, WX18, Wit15, Ano00a, BCRS15, BSS16, BS19, BKMY03, BKMY04, Bro06, CLM05, Can14, Cas20, Chr02, Chu01, Chu07c, Daw03, Daw06, Daw10, DAJ⁺15, Don14, DV21, FL06, FMPS17, Fla08, Gal14, GS12, GL07a, GL07b, GL08a, Gut04, Har07, HF06, Har12, Hia15, Hig03, Hil15a, Hil20, HLS006, HPH12, Joh12, Kin05, Lak17, Lam15, Lan13, Lan09, Lan11, Lan12, Law15, Lee11, LHB14, LFT09]. **programming** [LL08, Lob19, Lot14a, Lot15a, MS⁺00, Mau02, McG98a, MRG18, MR07, MR09, MBW07, MSW08, Mue14, Nel15, Och09, Pal14, Phi10, Phi15, Ram15, RG10, RG14, RH15, Ros13, Sah12, Sah15, Sal18, SL08, SV14, Sar14, SW15, SWD15, Sei09, Sei14, She15b, SB15, Sum08, Swe13, Swe14, TSC02, ÜK12, WvA96, Wep15, WO14, Zac15, ZKB⁺08, Bax01, Ano97a]. **Programs** [Di 14, JCY⁺19, ÅW16, BSS16, Lan13, Nag06]. **progress** [Sie17]. **project** [Cha15, Pop10, You08]. **Projects** [VCR17, Arb14, Bal12, Ben08, SW14, Sal18]. **Projekte** [Ric14]. **propagation** [MD22]. **properties** [AZLY18, CM20, SLDF⁺21, TR22, WV22]. **Protein** [SN12, KRH18, MMEH08]. **proteins** [MMEH08]. **prototype** [Len15]. **prototypes** [DAJ⁺15, YPB16]. **Prototyping** [BKC14, KBC⁺20, Spe19, UVa95, CBLI22, RCRS06, ST⁺07, vd91]. **provenance** [PMBF17]. **provided** [Pip15]. **Providing** [Ras18]. **ProxySource** [Ano01b]. **pruned** [BB22]. **psrqpy** [Pit18]. **Pteros** [Yes15]. **publication** [JAGP14, Tos09]. **publications** [RRRGVD19]. **Publishable** [SJL18]. **published** [Gve09]. **Pudipeddi** [Myr15]. **pulsar** [Pit18]. **pulse** [MD22]. **pure** [SSD⁺22]. **pure-Python** [SSD⁺22]. **Purpose** [AJYH18, LS16, TV13]. **put** [Cas20]. **puts** [Ang99]. **pvlib** [HHM18]. **py** [BFT20, HC16, MD22, SdSS16]. **Py-ART** [HC16]. **py-fmas** [MD22]. **PY-SUMMA** [AVS20]. **Py2neo** [Gup15]. **PyACTS** [DGMP09]. **PyARPES** [SL20]. **PyBEST** [BLN⁺21]. **pybliometrics** [RK19]. **pycalphad** [OL17]. **PyCDFT** [MWK⁺20]. **PyCDT** [BMZ⁺18]. **PyCharge** [FH22]. **PyCiGen** [GTC21]. **pycity_scheduling** [SUM21]. **Pycket** [BBH⁺15]. **PyCM** [HJHZ18]. **PyCOMPSs** [TBA⁺17]. **PyDDRBG** [AES⁺22]. **PyDEC** [BH12]. **PyDEF** [SJL18]. **PyDII** [DMC⁺15]. **PyDMD** [DTR18]. **PyDTNN** [BCM21]. **pyEIA** [VCLS21]. **pyEIT** [LYX⁺18]. **PyF95** [LC11]. **pyFIRI** [ZRK21]. **PyFR** [Wit21]. **PyFrac** [ZL20]. **Pyg4ometry** [WAN⁺22]. **pygal** [Ada14]. **Pygame** [KM15, McG07a]. **PyGBe**

[CFCB17, CCFB16]. **PyGBe-LSPR** [CFCB17]. **pyGDM** [WMA⁺22, Wie18]. **pyGFC** [Ngu08c]. **pyGLLE** [MD21]. **pyGlobus** [Jac02]. **Pygpc** [WPM⁺20]. **pyGPGO** [JG17]. **PyGran** [AM19]. **PyGTED** [BSSz⁺20]. **PyGtk** [CK00]. **pyhector** [WHG17]. **pyIAST** [SSH16]. **PyIVNS** [SABEh20]. **pyJac** [NCS17]. **pyJacqQ** [JWHS16]. **Pykat** [BJR⁺20]. **PyLCP** [EBNS22]. **PyLESA** [LFT21]. **PyLighter** [BC09]. **PyLlama** [BVV22]. **PyLog** [HWJ⁺21]. **Pylons** [Gar09]. **PyLops** [RV20]. **Pymagicc** [GWM18]. **PyMaxEnt** [SR19]. **PyMC** [PHF10]. **pyMDO** [MMT09]. **PyMGRIT** [HFB21]. **PyMikor** [Bar22]. **PyMIP** [AW06]. **PyModPDE** [KSS20]. **PyMOL** [Moo21, WBS21]. **PyMTL3** [JPOB20]. **pyneqsys** [Dah18b]. **pynucastro** [WZ18]. **pyodesys** [Dah18c]. **PyOMP** [MAG21]. **pyarsing** [McG07b]. **pyParticleEst** [Nor17]. **pyparty** [Hug14]. **PyPathway** [XL18]. **Pyper** [XMW10]. **pyPhenology** [Tay18]. **PyPhotonics** [TR22]. **PyProcar** [HTH⁺20]. **PyPSA** [BHS18]. **PyPy** [ABF13, LJ19]. **PyQT** [Har12, Rem01a, Sum08]. **PyR** [LS17, SS21]. **PyRad** [AME⁺21]. **PyRDM** [JAGP14]. **Pyret** [NMGB17]. **PyRETIS** [LRvE17]. **Pyrgg** [Hag17]. **Pyro** [BKMY03, BKMY04]. **pySDC** [Spe19]. **pySDC-Prototyping** [Spe19]. **pySecDec** [BHJ⁺18, HJJ⁺22]. **pysimm** [DFC18, DPF⁺21, FC17]. **PySPH** [RBP⁺21]. **PySpike** [MK16]. **PySPLIT** [War18]. **pysrim** [OZW18]. **PySSM** [SBMD14]. **PySTPrism** [LDAL20]. **pySuStaIn** [AWO⁺21]. **PySwarms** [Mir18]. **PySy** [WO14]. **pythermalcomfort** [TS20]. **Python** [Ano97c, Ano00b, Ano02, AJH⁺12, BBB02, Bax01, BK19, CR15, DFC18, DPF⁺21, DF00, EK08, Haj08, Hil20, Hug01, Ish17, Ish19, Jan10, Joh15, Lac06, Lee17, Lin06b, LAG07, Mat16, Mil18, Mue14, Orb18, Ram18b, RAH⁺01, Ric14, Sar14, SML06, Ste14, SKS08, Swi09, The09, Wei06a, Wei09, Wep15, BKMY04, Gra18, HJPB17, HHM18, LYX⁺18, MB17, NEGZG18, Pit18, Smi17, Smi18, SH19b, Swe14, Tay18, Wie18, ÅW16, Ada14, ASAA20, AES⁺22, AVS20, AWO⁺21, ABGD⁺20, ABS20, APS10, AW06, Ang99, Ang00b, Ang00c, Ano95, Ano97b, Ano98a, Ano98b, Ano98c, Ano98e, Ano00c, Ano01b, Ano12, Ano18, Ano19, Ano20, Anoxxa, Anoxxb, Anoxxc, Anoxxd, Ant15, ADP21, Arb14, ABC97, AM21, Aya14, Bäck07, Bah15, Bai08, Bar21, BKRT21, BDF⁺20, BP17]. **Python** [Bar11, BUS21, Bas08, Bas10, BG17, Bau96, BSG⁺16, BLP⁺21, BVV22, BL97a, Bea00, Bea01, Bea06, Bea09b, Bea09a, Bea12, BJ14a, BJ14b, BHF16, BS21, BISC14, Bie21, Bie97, BVB⁺07, BST⁺17, BK19, BKL09, Bis01, BLE21, Bla02, Bla04, BKMY03, BMK03, BWMS22, Boe17, BE20, BT21, BLN⁺21, Bor07, BSSz⁺20, BM15, BHA18, Bow15, BW14, BB22, BYL⁺21, Bra13, BFM18, Bri12a, Bri12b, BMZ⁺18, BCG05, Bro00, BM18, BHS18, BJR⁺20, Bro06, BA14, Bru09, Buc15, Buc14, CGHGRB21, CLM05, CL06, Can14, Cas17, Cas20, CSZ⁺19, CMM14, Cha15, CV15, CFSK14, CM20, CFW17, CBLI22, CS09, Chr02, CSRV13, Chu01, Chu02a, Chu02b, Chu07b, Chu07a, Chu07c, Chu08, CKK⁺13, CFÁA⁺20, CFCB17, Coe17, CH17, CLMM20, CHG⁺16, CR12, Con95, CBB14, CCFB16, CC20, Cot03, CWM⁺21]. **Python** [CWLG⁺21, Cox14, Cri18, Dah18a, Dah18c, DPS05, DPSD08, Dal07, Dan18a, Dar12, Dav21, Daw03, Daw06, Daw10, Day14, Day07b, Day07a, DyH21, DMD⁺21, DEMM19, Dec04, DM20, DDLW02, Dej22, DTR18, DAJ⁺15, Di 13, Di 14, DB17, DMC⁺15, DD15, Dog15, DDMS14, Don09, Don14, Dör08, Dou98, DFSW19, Dow09, Dow15, DGMP09, DY96a, DHH96, DY96b, DY99, Dub07, Duf15, DV21, DBdFdSR21, EBNS22, EPM09, EK08, EK09, Ern99,

Est01, EVV12, Far02, Fas18, Feh02, FMPS17, FKA⁺¹⁷, FH22, FRdN21, Fla08, FV18, FBC09, FM16, FC17, FLR22, FPSZ21, Ful96, Gad09, GMKRS21, GH18, GHN19, Gal14, Gar98, Gar09, GS12, GRW⁺¹⁹, Gez20, GWM18, GJ08, GdGB⁺¹⁸, Gir21, GP22, GQCP⁺¹⁸, GHT06, GHT08, GZT⁺¹⁸, GL07b, GL08a, GL08b, GL08c, GFB⁺¹⁴, GO14]. **Python** [GHKW22, GPP⁺²¹, Gov15, GF18, GDP18, GEH19, Gra00, Gre18, Gre07, Gre16, GRKN⁺¹⁹, Gue18, GG21, Gun14, Gup15, Gut04, Gut13, Gut16, GWW09, HBS⁺²⁰, Hag17, HJHZ18, HFB21, Ham98, HR00, Han18, HAE00, Har15, HF06, HR20, Har12, Has16, HHVB21, HC16, HTH⁺²⁰, Her14, HU17, HPT⁺¹⁶, HBA⁺²⁰, Het02, Het05, Het08, Het10, Het14, HFF⁺¹⁷, Hia15, Hig03, Hil15a, Hil15b, Hin02, Hin03, HLS006, Hin07, HHJCRB21, HQF⁺²⁰, HAB⁺²⁰, HRS06, HB16, Hos14, HK15, How06, How98, HH17, HWJ⁺²¹, Huc18, Hug99, Hug14, HLR15, Hug18, Hug97, HHP⁺¹⁶, Idr14, ICVG14, ISMA18, Jac02, JAGP14, JEC18, JPOB20, JG17, JWHS16, JNN12, JNN13, Joh08, Joh12, JM20, JD02, Jos15, Kak08, KSS20, KS21, Kar14, Kas15, KJ15, Kin05, KN15, Kin09, KM15, KPK⁺¹⁷]. **Python** [Kiu10, Kiu13, Kla99, Kla11, KVSC21, Kno08, KSH14, KHD⁺¹⁶, KBC⁺²⁰, KJ14, KB07, KB18, KMK⁺²¹, Kuc97, Kuc98b, Kuc98c, KD99, KBLJ18, Lac06, LS97, LFN⁺¹¹, Lam15, Lan13, LM03, Lan06, Lan07, Lan08, Lan09, Lan11, Lan12, LRPD18, Law15, Lay15, LeV09, Lee11, LHH⁺²¹, Len15, LRvE17, Lew09, LVH⁺¹⁸, LHB14, Lin06a, Lin06b, LL08, LHM14, LWH12, LR14, Lot14a, Lot14b, Lot15a, Lot15b, Lub14, Lun01, LH20, LDW⁺²¹, LD07, Lut96, Lut98a, Lut98b, LA99, Lut99, Lut01, Lut02, LA04, Lut05, Lut06, Lut08, Lut09a, Lut09b, Lut13, Lut14, LFT21, LWV20, LS17, MWK⁺²⁰, Mac92b, MAC⁺²¹, Mad15, MD17, MP19a, MP19b, MS15, MAFM21, MSL⁺⁰⁷, Mar17, Mar18, MLB22, Mar02, Mar03, MMA05, Mar06, MRA06, Mar07, MCGK19, MM06, MAG21, May17, MTS⁺¹⁸]. **Python** [McF16, McG98b, McG98c, McG98a, McG00, McG07a, McK12, Meh15, MMEH08, MD21, MD22, MPMC21, MTPHH18, MFQ⁺²¹, Mer03, MMG19, MMP11, MSR03, MR07, MR09, Mil14, Mil15, MB07, MA11, MH15, Mir18, MWS18, Mit15, Moh15, MBW07, Mor17, ML16b, Mos20a, MSW08, MSS⁺¹⁹, ML18, MK16, MAC14, Mül13, MR18, Mur18, MS07, MGS07, NMGB17, Nag06, Nel15, Ngu08d, Ngu08a, Ngu08b, Ngu08c, Ngu08e, Nil07b, Nil07a, Nix15, Nor17, O'C13, Oli07, Orl97, OMGDG14, OE21, OC20, OL17, OPA⁺¹⁴, Pal14, DDT20, Par11, Pat16, PHF10, Pay11, Per14a, PGH11, Per14b, Pet02, Phi10, Phi15, Pil04, Pil09, PMBF17, Pip15, Ple02, Plo97, PRH17, PMM⁺¹³, PHH⁺¹², Pop10, PBN⁺⁰⁹, PSGL21, Pre03, PW17, PWFM17, Pul00, QZWU19, RS17, Rad06, Rad08, RKVL14, Ram18a, RBP⁺²¹]. **Python** [Ram15, RG18, RDS07, RCAE⁺²⁰, RG00, RNR17, RMZG06, RO15a, Ras18, Ras20, RV20, RO15b, Ree04, RZ09, Rem01a, Rem01b, RG10, RG14, Ric15, RGS⁺²¹, RSPJ21, RH15, Rom14, Roo97, Ros18, RK19, Ros13, Ros14, RC18, RKR21, SR19, SW14, Sah12, Sah15, SSH08, Sal14, San13, SL08, San15, SV14, SW15, ST⁺⁰⁷, Sch21, Sch17, SL21, SUM21, Sco17, SWD15, SHFJ18, Sei09, Sei14, SDP⁺²⁰, SBC⁺¹⁷, Sev13, Sev15a, Sev15b, SGPHD⁺¹⁷, Sha03, She15a, She97, Shi07, Sil14, SAA18, SSD⁺²², SSH16, SLDF⁺²¹, SLGB14, SdSS16, Sit02, Sla15, SABEh20, Sma12, SG18, SMM⁺²², SK19, Spi18, Spo12, Sta17, Sta19, Ste06, SB15, SBMD14, SM04, Stu07, Suc13, SH17, Sum08, Sum09, Sum10, Suz97, Swe09, Swe13, Tab10, Tan01, TFAL21, Tan06, TS20]. **Python** [Tau16, TR22, TBA⁺¹⁷, Tel06, TCE21, TSC02, Tie16, TGEA09, Tom15, Tos09, Tro96c, Tro96a, Tro96b, Tro97,

TBJ18, ÜK12, Ull15, Vai09, Vai14, VB08, Van97b, Van16, Var16, VAP⁺21, VC18, Vir16, VCLS21, VKSB15, VBM⁺18, WX18, Wal07, WAN⁺22, Wal97, WRBT21, War18, Wat95, WvA96, Wei06b, Wei15, WPM⁺20, WAK22, Wes15, Wet20, WMA⁺22, WMA12, WMM18, WO14, Wil97a, WHG17, Wil00, Wil05, Wit21, WV22, XMW10, XL18, YKKD19, Yan14, YHX22, Yes15, You08, YH21, Zac15, ZTC⁺21, ZAPS20, ZC20, ZXZX22, Zho97, ZMS18, Zia06, ZKB⁺08, Zie19a, Zie19b, ZRK21, Zuk97, dos01, vd91, van95a, van95b, van95c, van95d, van97a, van98b, van98c, van98a, vRDK99, vRD03, vRD05a, vRD05b, vdOJP⁺20, vdH18, vF97, Bri06, HHM18, Ano97a, Ano13]. **Python** [Ano15a, Ano15b, Joh97, Lak17, Lip21, Lip22, Myr15, Orr05, Roo98, ZMD21, Ano00a, Ano14, Cla15, Gve09]. **Python-3** [MCGK19]. **Python-Based** [BBB02, BKMY04, Aya14, HWJ⁺21, Ram18a, ABGD⁺20, BKMY03, Dav21, Dec04, GP22, GPP⁺21, Gup15, JAGP14, Lac06, LHH⁺21, PBN⁺09, RBP⁺21, VCLS21]. **Python-Buch** [vF97]. **Python/C** [van98c]. **Python/Jupyter** [Bar21]. **pythonic** [ENCS20, BLN⁺21, Dal01]. **Pythons** [Dub05]. **PythonTeX** [MS13, Poo16]. **Pythran** [Gue18]. **Pytim** [SHFJ18]. **PyTOPS** [YKKD19]. **PyTorch** [Mis19, RM19, SH19a]. **PyTransport** [MR18]. **PyTrilinos** [SSH08, Spo12]. **pyuca** [Tau16]. **PyUnfold** [BHA18]. **PyUNIXMD** [LHH⁺21]. **pyuvdata** [HJPB17]. **pyvine** [YH21]. **pyvrft** [BE20]. **PyXtal** [FPSZ21].

Q&A [Chu02b]. **Qball** [AME⁺21]. **QCOBJ** [VC18]. **QEDv2** [SV14]. **QExpy** [MCGK19]. **QGIS** [Law15]. **qha** [QZWU19]. **QmeQ** [KPK⁺17]. **Qt** [Sum08]. **quadratic** [GS12]. **Quail** [CBLI22, HFF⁺17]. **quality** [Tos09]. **quantification** [KMK⁺21]. **Quantifying** [ZXZX22]. **QuantImPy** [BT21]. **Quantitative** [KLM14, KLM15, Yan14]. **quantity** [VC18]. **quantity-aware** [VC18]. **QuantLib** [Vir16]. **QuantLib-Python** [Vir16]. **Quantum** [Nil07b, GPP⁺21, Gra18, HPT⁺16, JNN12, JNN13, KPK⁺17, SV14]. **quasiharmonic** [LDW⁺21, QZWU19]. **quaternions** [RG18]. **Qudi** [BST⁺17]. **Quelltext** [DF00]. **Query** [Bis01]. **querying** [Pit18]. **quest** [Ros08]. **Questionnaires** [MD17]. **queueing** [DDMS14]. **quick** [Lob19]. **quickly** [SW15]. **quickstart** [Feh02]. **quimb** [Gra18]. **quivers** [GS12]. **QuTiP** [JNN12, JNN13].

R [Lip22, AVS20, BP17, Dan18a, GH18, GHN19, Mil14, Mil15, Müll13, Smi17, Smi18, SMM⁺22, XMW10, XDR21]. **R/PY** [AVS20]. **R/PY-SUMMA** [AVS20]. **R/Python** [AVS20]. **R13** [TT21]. **Radar** [HC16]. **radiation** [WAN⁺22]. **radiolysis** [AME⁺21]. **Ramp** [SYGY21]. **Random** [Hag17, KJ14, Pat16, PRH17, CSRV13]. **range** [Pip15, Sar14]. **ranging** [She97]. **rankings** [Cas20]. **Rapid** [Ano01b, GDP18, RDS07, Ree04, RCRS06, Sum08, UVa95, Gar09, ST⁺07]. **rare** [LRvE17]. **Raspberry** [BW14, Cox14, Don14, MAFM21, Nix15]. **rate** [DCOC⁺19, McF16]. **rates** [WZ18]. **Rational** [Ano00c]. **Raton** [Lip21, Lip22]. **Ravishankar** [Myr15]. **ray** [CG17]. **raytracing** [Gir21]. **RC** [MAFM21]. **RCLAda** [Mos20b]. **RDBMS** [DDK19]. **Reaching** [Gre07]. **reaction** [WZ18]. **reader** [Sta19]. **readership** [Myr15]. **reading** [HB16, VAP⁺21]. **ready** [Ada14]. **reagent** [Pop10]. **Real** [CWM⁺21, RAH⁺01, SGPHD⁺17, VCR17, Bri06, GHT08, Gup15, Jos15, Kar14, Lot14a, Sar14, Yan14]. **real-life** [Yan14]. **Real-Time** [CWM⁺21, SGPHD⁺17]. **Real-World** [VCR17, GHT08, Gup15, Jos15, Kar14, Lot14a, Sar14]. **Reality** [UVa95]. **realtime** [MDRN18]. **recall** [HFF⁺17]. **Receptury** [BJ14b]. **Recipes** [BJ14a, Mis19, Buc15,

Cox14, Law15, Per14b, Ros14, Sar14]. **Reciprocal** [Sco17]. **recoloring** [TEG18]. **Recommending** [STS⁺18]. **reconciled** [BCC⁺18]. **Reconfigurable** [Kla99]. **reconnecting** [Lon08]. **Reconstruction** [OPA⁺14, MMG19, SR19]. **Recordings** [TS14]. **Records** [GRG21]. **recursion** [SG07]. **Reduction** [BTR14, MTPHH18]. **Reed** [Jan10]. **Reference** [Ano00b, BE20, Lut98b, Lut02, van98c, vRD05a, BS19, Bea00, Bea01, Bea06, Bea09b, GHT08, Lob19, Lut05, Lut14, Stu03, Stu07, van95b, van95c]. **Referenz** [EK08]. **Refinement** [LP19]. **region** [Ott18]. **region-based** [Ott18]. **regions** [HJJ⁺22]. **Regression** [BHF16, Lip22]. **Regular** [Stu03, Stu07, YH21, LR14, Rom14, SM04]. **Reguläre** [SKS08]. **Related** [DD15, ML16a, Wes15]. **relationship** [LFT09]. **Relative** [HAB⁺20, MTS⁺18]. **relaxation** [WMM18]. **Relaxations** [Wit15]. **RelaxPy** [WMM18]. **Release** [Chu02a, vRD03]. **Released** [Ano00c]. **Releases** [Ano00c]. **Religions** [Wil00]. **remarkable** [Tos09]. **remediation** [TFAL21]. **Renewables** [GMKRS21]. **repair** [BRM10]. **replacement** [Ano12]. **replay** [BRM10]. **Replication** [Ano21]. **Report** [Ano21, CM07, Pop10]. **Representation** [SDP⁺20, AZLY18, HPH12, SH17]. **Reproducible** [Coe17, LeV09, BLE21, SMM⁺22]. **reprogramming** [OMGDG14]. **requests** [CV15]. **resampy** [McF16]. **Research** [BVB⁺07, LeV09, Mir18, TS20]. **Researcher** [Moo21]. **réseau** [Swi09]. **Residual** [SJK⁺21]. **resilience** [ZTC⁺21]. **ResiPy** [ZTC⁺21]. **RESNET** [SJK⁺21]. **Resolution** [Ble20]. **resolved** [SL20]. **Resonance** [MB07]. **Resource** [Bru09, VFMM08]. **Resources** [Cas17]. **response** [FRdN21]. **responses** [SDP⁺20]. **responsive** [Ull15]. **REST** [Suc13]. **restrained** [ABS20]. **Results** [Ano21, Pop10]. **RETCON** [BRM10]. **retrofitted** [TTS⁺10]. **retuschieren** [DF00]. **Reusable** [Mit00]. **reuse** [Kno08]. **reverse** [Sei09]. **Review** [Ano97b, Ano97a, Ano00a, Ano13, Ano14, Ano15a, Ano15b, Cla15, Gve09, Ish17, Ish19, Jan10, Joh97, Lak17, Lee17, Lip21, Lip22, Mat16, Orb18, Orr05, Roo98, Wep15]. **Reviews** [Ano00b, Bax01, Hug01]. **Revolve** [HA20]. **Rexx** [Pre03]. **rft1d** [Pat16]. **RGBXY** [TEG18]. **RGBXY-space** [TEG18]. **RGEs** [LS17]. **Rich** [Lac06, Lac06]. **richtig** [DF00]. **Riemannian** [HAGH18]. **rifarensu** [SM04]. **Right** [HKM08, Buc15]. **Rigorous** [LV20]. **Robinson** [Ano00a]. **Robot** [GMS17, Len15, Mos20b]. **robotics** [BKMY03, BMK03, BKMY04, Len15, Men09, OMGDG14]. **Robots** [KB07, FMPS17, Men09]. **robust** [Pal14, SK19]. **Robustness** [CFMR19]. **rock** [Ras20]. **Rookies** [MSW08]. **ROOT** [DOS17]. **root_numpy** [DOS17]. **roots** [GS12]. **ROPTLIB** [HAGH18]. **ROS** [Len15]. **Rossum** [Chu02b, Dou98, Kuc98a, Sev15a, Sev15b]. **Rotten** [ADP21]. **Routines** [Mül13]. **rowan** [RG18]. **RPC** [Por03]. **RPython** [MRG17]. **Ruby** [SKS08, Bla02, Bla04, Gut04, Ngu08d, Ngu08e, Stu07, ZMD21]. **rule** [Sto13]. **rules** [SK19]. **run** [Pip15]. **Running** [Ber13, SW15]. **runtime** [VSS17]. **Russell** [Ano00b]. **Rust** [ABCV21, LH20]. **S2352711016300395** [DPF⁺21]. **safe** [Men09]. **Saha** [Ano15b]. **salabim** [vdH18]. **SALib** [HU17]. **Salt** [Hos12]. **sample** [McF16]. **sampled** [GEH19, SH19a]. **Sampling** [BFM18, OPA⁺14, SN12, YH21]. **San** [ACM92, Ano97c]. **Sarkas** [SSD⁺22]. **SATLAS** [GdGB⁺18]. **Scalable** [ENCS20, GFB⁺14, Lon08, RSRT19, Mos20a, Pip15, RV20]. **scale**

[BL97b, BHJ⁺18, BCG05]. **scales** [PBN⁺09]. **Scaling** [MAC14]. **Scatterplot** [FM16]. **scheduling** [SUM21]. **Scheme** [DF00]. **Schemes** [BHF16, Sta17]. **schneller** [Wei06b]. **schwimmbad** [PWF17]. **Science** [Bad20, Bar21, HHJCRB21, IEE97b, Lan08, MT18, Van16, VMFG17, BM15, HHK⁺09, Jos16, Lan06, Lan07, Lob19, Mad15, MT19, MR07, Mil14, Mil15, Nel15, PSGL21, Rad06, RMZG06, Ras18, Ros14]. **Sciences** [Has16]. **Scientific** [BKRT21, DGMP09, DY96b, DY99, HTA⁺97, Hin02, Oli07, PG07, PGH11, SDS00, Sma12, VB08, BL97b, Ber13, CLM05, CSRV13, DDMS14, FKA⁺17, Hil15a, Hil20, JAGP14, Lak17, Lan09, Lan11, Lan12, Meh15, Nil07a, NEGZG18, Ras18, RCRS06, RRRGVD19, SML06, Wep15, YFD98]. **Scientist** [Dow15, KHD⁺16, Dow09, DDK19]. **Scientist-Orientated** [KHD⁺16]. **Scientists** [MA11, Nag17, Ste14]. **scientometric** [RRRGVD19]. **ScientoPy** [RRRGVD19]. **Scikit** [HLR15]. **Scikit-spectra** [HLR15]. **SciPy** [Ber13]. **SCO** [DF00]. **Scope** [Myr15]. **Scopus** [RK19]. **Scott** [Ano19, Mit00]. **scraper** [Nai14]. **scrapping** [Mit15, Nai14]. **scratch** [Jos16, Len15]. **Scriptable** [RK19]. **Scripting** [Ano98d, Bea98, Dör08, Hin07, Kak08, Lan08, Lut98a, Lut01, McG98c, Ngu08e, Pre03, Rem01b, Wei06a, AW06, Bea96, BL97b, CEI⁺12, FhDAF09, LS97, Lan06, Lan07, Ngu08d, She97]. **Scripts** [Bla04, GTC21, LM03, She97, Van97b, Ano12, Bla02, Ngu08d, PMBF17, Vai09, Vai14]. **sDNA** [CC20]. **seamlessly** [CV15]. **Searching** [KBLJ18]. **Seattle** [CI96]. **Sebastopol** [Ano97a, Ano00a]. **Second** [Ano00b, Orb18, USE96, Ano00c]. **Secret** [Swe13, Lot14b]. **Security** [Dan18b, O’C13, Ste06]. **SED** [Dav21, Bla02, Bla04]. **SEDBYS** [Dav21]. **Seiki** [SM04]. **Seitz** [Ano15a]. **selection** [SVY09]. **Selective** [Zuk97]. **Selenium** [Gun14]. **Self** [VMFG17, FH22, HWW⁺15, MD15]. **self-consistent** [FH22]. **Self-Explain** [VMFG17]. **self-optimizing** [HWW⁺15, MD15]. **semantic** [OA17]. **Semi** [Ano97d, LV20, KVSC21]. **Semi-Automatic** [LV20]. **semi-empirical** [KVSC21]. **Semi-Structured** [Ano97d]. **semiconductors** [AM21, BMZ⁺18]. **Semidefinite** [Wit15]. **semistructured** [HGMC⁺97]. **SEML** [ZV19]. **sendmail** [Ano00b]. **sense** [Mad15]. **Sensitivity** [HU17, WPM⁺20]. **Sensor** [KBC⁺20]. **Seq** [SNB⁺19]. **sequences** [WBS21]. **serial** [CLM05]. **Series** [KSB12, ASAA20]. **Server** [Ang00b, Ang00c, Ano00c, Ano01b, GMS17, Mit00]. **Servers** [Kla99]. **services** [CV15]. **setups** [CWM⁺21]. **Seven** [Pre00]. **sharing** [Hos14]. **sharpen** [Ros14]. **Shawcroft** [Ano19]. **shell** [AME⁺21, Bla02, Bla04]. **shmlast** [Sco17]. **short** [MDRN18]. **Should** [How06]. **Showcase** [USE00]. **SIAM** [HTA⁺97]. **side** [Jos16]. **Signal** [APS10, MD22]. **Signatures** [RG20]. **similarity** [ZC20]. **Simple** [MAFM21, AW06, BS21, GWM18, Lub14, She97, WHG17]. **Simplified** [ZV19]. **simplify** [GQCP⁺18, HLS006, BB22]. **SimPrily** [GQCP⁺18]. **simulate** [Len15]. **Simulating** [MMEH08, AME⁺21, BFT20, Mar17, SV14, Sch21]. **Simulation** [JPOB20, AM19, ABGD⁺20, BSG⁺16, BYL⁺21, CS21, DPH16, DFC18, DPF⁺21, FC17, WAK22, vdH18, vdOJP⁺20]. **Simulations** [MSS⁺19, CMM14, DyH21, DEMM19, FH22, GQCP⁺18, HHP⁺16, ML16b, RKVL14, San13, SHFJ18, Wie18, WMA⁺22]. **Simulator** [LFN⁺11, ZL20]. **SimuPy** [Mar17]. **singularities** [SL21]. **Sismic** [DM20]. **site** [DMC⁺15]. **sites** [RDS07]. **sized** [LRvE17]. **sizing** [Hug18]. **Skew**

[Wim12]. **Skew-Symmetric** [Wim12]. **Ski** [MH18]. **skijumpdesign** [MH18]. **Skill** [Ngu08d]. **Skills** [Ano20, DV21, LFT09, Ros14, She15b]. **Skin** [SJK⁺21]. **Small** [FSZD20]. **smart** [LFT21, Seg07]. **SMMP** [MMEH08]. **Smooth** [Pat16]. **Smoothed** [RBP⁺21]. **Snake** [Wit21]. **SNAP** [LS16]. **Snippet** [Har15, Moo21, XMW10]. **SOA** [Suc13]. **SoC** [LHM14]. **social** [sR11, Rus14]. **Soft** [AJYH18]. **Software** [ACM97, Ano01b, BH12, Coe17, Gve09, HPT⁺16, Hin03, IEE97b, LRvE17, ML16a, PHH⁺12, RRRGVD19, STS⁺18, SdSS16, SJL18, TFAL21, Tro96c, Tro96a, Tro96b, Tro97, Yes15, AME⁺21, BWMS22, CG17, CWLG⁺21, DPH16, DMD⁺21, Dow09, Hen08, JAGP14, KSS20, KS21, KCS11, KI19, MLB22, Ros08, SR19, TV13, WV22, ZAPS20, ZKB⁺08, ZRK21, Ano00c, Ano01b]. **solar** [HHM18]. **Solaris** [DF00]. **Sold** [RAH⁺01]. **Soldier** [RAH⁺01]. **solute** [DMC⁺15]. **Solution** [BT06, LMW12, Bra13, DCOG⁺19, Mis19, SSH16]. **Solutions** [Tro96c, Tro96a, Tro96b, Tro97, Sar14]. **Solve** [Dah18b, DB17, MSL⁺07, Kar14, She15b, Wil05]. **solvent** [CBB14]. **solvent-filled** [CBB14]. **Solver** [TT21, CFCB17, CBB14]. **Solvers** [CL06, CFMR19, SSH08]. **Solving** [Bar21, ŠBA⁺15, CKK⁺13, MD21]. **something** [Orl97]. **Sometimes** [Wil02]. **sophisticated** [She97]. **Sorted** [Har15]. **soundness** [VSS17]. **Soup** [Nai14]. **Source** [Anoxxd, HYG16, JPOB20, LFN⁺11, Ray98, Bah15, BK19, BLN⁺21, CFW17, CG17, CBLI22, DPH16, FH22, HU17, Idr14, JNN12, JČMG11, KPK⁺17, KSH14, MDRN18, OE21, PSGL21, SML06, TV13, Ull15, YHX22, You08, ZRK21]. **sous** [Bla02, Bla04]. **Space** [JWHS16, STS⁺18, SBMD14, LDAL20, TEG18]. **Space-Time** [JWHS16, LDAL20]. **Sparse** [Wit15, LRPD18]. **Spatial** [LVH⁺18, CC20, GEH19]. **Special** [Bal12, Kor11]. **Special-Function** [Kor11]. **species** [WV22]. **specific** [HWW⁺15, Sla15, WRBT21]. **Specified** [MH18]. **spectra** [Mur18, HLR15]. **Spectral** [CH17, Spe19]. **Spectrometry** [SN12]. **Spectrometry-Based** [SN12]. **spectroscopies** [SL20]. **Spectroscopy** [HLR15]. **'Spectrum'** [CH17]. **Speculative** [JCY⁺19, BB17]. **SpharaPy** [GEH19]. **spike** [MK16]. **spin** [MFQ⁺21]. **spin-polarizers** [MFQ⁺21]. **Spinney** [AM21]. **Sprachgrundlagen** [EK08]. **Spring** [Eur91]. **SQL** [Bad20, SCAK⁺19, Ano20]. **SQLAlchemy** [Cop08, Gar09]. **squeezing** [Ano19]. **Sridevi** [Myr15]. **SRIM** [OZW18]. **stable** [BVV22]. **stack** [Ras18, Hos12]. **Stage** [AWO⁺21]. **Standard** [Bie21, Lun01, Gar09, HCPF95, OE21, Spi18]. **Standardization** [RKR21]. **Starbase** [Ano00c]. **Starch** [Ano15a, Ano15b]. **Stark** [CFSK14]. **Stark-effect** [CFSK14]. **Stars** [Gre07, Dav21]. **start** [Cha15, Cla15, Her14]. **Started** [Nai14, BCRS15, Hos12, McG07b, Nix15, Ric13]. **Starting** [Gad09]. **Stata** [HHJCRB21, SMM⁺22]. **State** [SBMD14, LHH⁺21, Wei15]. **state-of-the-art** [Wei15]. **statechart** [DM20]. **stAtes** [KBLJ18]. **static** [AES⁺22, FhDAF09, RJAL09, RF16]. **statically** [CEI⁺12, IOC⁺12]. **statically-typed** [IOC⁺12]. **statistical** [BWMS22, CSRV13, HR20, San13, Wei15]. **Statistics** [Has16, ICVG14, JWHS16, SLGB14, Sah15, Ish17]. **StatMechGlass** [BWMS22]. **Status** [DF21]. **Steering** [YFD98]. **Stencil** [LLL⁺20]. **Stern** [CBB14]. **stk** [TBJ18]. **Stochastic** [PHF10, OE21]. **Stop** [Ray98, Wit21]. **Storage** [BDT13, KI19, NEGZG18, PFH⁺16]. **store** [Fas18]. **stored** [HF06]. **Straightforward** [Dah18c, Arb14]. **strain** [SH19b]. **strategies**

[BDT13, PFH⁺16]. **Strategy** [MWS18, SYGY21]. **street** [Boe17]. **string** [Huc18]. **Structure** [BLN⁺21, CSZ⁺19, BWMS22, FPSZ21, HTH⁺20]. **Structured** [Ano97d, Mur18]. **Structures** [ISMA18, Jan10, RZ09]. **Structuring** [Ngu08a]. **stub** [vd91]. **Student** [Lee17, SG07, SL08, WX18, Ish19, KN15]. **Students** [SDS00, HS13, Lon08]. **Studies** [JWHS16, BLE21, ÜK12]. **Studio** [SW14, SW14]. **Study** [TS14, AJJF14, LJ19, LHM14, OMGDG14, Rad08, RCRS06, TFAL21, WRBT21]. **Studying** [MAFM21, May21]. **stuff** [Swe14]. **Stunden** [Wal07]. **Style** [Wei06b]. **subspaces** [CHG⁺16]. **substances** [Zie19b]. **Subtype** [AWO⁺21]. **Successful** [RMZG06]. **such** [Gup15]. **suitability** [OMGDG14]. **suite** [BST⁺17, SSD⁺22, GDP18]. **SUMMA** [AVS20]. **Summarization** [VPO19]. **Summit** [Ray98]. **Supercomputing** [BLP⁺21]. **Supersymmetric** [Bie21]. **support** [DDK19, HB16, HMD⁺96, IOC⁺12, MCGK19, Tab10]. **Supporting** [HBS⁺20, KL97]. **supports** [SML06]. **supramolecular** [TBJ18]. **survey** [Ish17, ICVG14, MTS⁺18, RRRGVD19, BLE21]. **SuSe** [RAH⁺01]. **SVG** [Ada14]. **SW** [Wu13]. **Swarm** [Mir18]. **SWIG** [Bea96, Bea98, Cot03]. **SWIGLAL** [Wet20]. **Switching** [GRG21]. **Switzerland** [IEE97a]. **Symbolic** [FLR22, JCY⁺19, AM10, BKC14, Cri18]. **symbolically** [Dah18b]. **Symmetric** [Wim12, CFSK14]. **symmetry** [CFSK14, FPSZ21]. **Symposium** [ACM97, CLT20, HK95, IEE97a]. **SymPy** [JČMG11]. **synchronizing** [DTM⁺18]. **Synchronous** [HA20]. **synchrony** [MK16]. **Syngress** [Ano13, Ano14]. **Syntax** [SS13, Lob19]. **Synthesis** [HWJ⁺21]. **synthesizing** [LWH⁺10]. **System** [Ang00a, Ano00c, BHS18, Bru09, EVV12, IG19, Kor11, LLL⁺20, PG07, ZGL20, CS21, FLR22, GJ08, Hos12, HMD⁺96, KCS11, KL97, Sil14, Ste06, Mos20b]. **Systems** [Ano21, BKRT21, CI96, ESM98, Eur91, KDC⁺18, LP19, LFT21, MS07, MGS07, USE96, CR15, DPH16, Dah18c, Dah18b, DFC18, DPF⁺21, DDMS14, FC17, HHM18, JNN12, JNN13, JČMG11, LHM14, Mar17, MMP11, Pal14, QZWU19, SUM21, SAA18, VSS17, ZTC⁺21].

T [Ano00b, Ano13, Ish17]. **tailor** [Cox14]. **tailor-made** [Cox14]. **Taint** [CR12]. **tale** [GHT06]. **talk** [Sie17]. **tasca** [Day07a]. **Task** [GMS17, Fee16, HBS⁺20]. **Tasks** [MD17, Sar14]. **Taylor** [Lip21, Lip22]. **TB2J** [HHVB21]. **Tcl** [SML06, Ass96, DF00, Bla04, Ngu08d, Ngu08e, Bla02, LS97, McG98c, Pre03]. **Tcl/Tk** [Ass96, McG98c]. **TDD** [Sal14]. **TE** [LS17, SS21]. **teacher** [Myr15]. **Teaching** [GL07b, GL08c, KLM14, KLM15, BKMY03, BKMY04, CBLI22, MBK09, RMZG06]. **tech** [Cas17]. **Technical** [KDC⁺18, BCRS15, BS19, TFAL21]. **Techniques** [Joh15, Mat16, Bow15, Idr14, Lan13, MS15, Mil14, Mil15, Per14b, TSC02]. **Technologies** [USE96]. **Technology** [ACM97, ESM98, Hos14, Lon08]. **Ted** [Cla15]. **teens** [Lam15]. **Teleconferencing** [Ago01]. **TeMIP** [AW06]. **Template** [How98]. **templating** [LC11]. **Temporal** [LVH⁺18]. **Tensorial** [TT21]. **Teradata** [SCAK⁺19]. **terms** [MD22]. **Test** [Gov15, HAB⁺20, Ngu08a, Per14a, Ang99]. **Test-driven** [Gov15, Per14a]. **testers** [O’C13]. **Testing** [Duf15, Sal14, YH21, Arb14, Buc15, DM20, Gun14, LC11, Moh15]. **Tests** [Ano21, ADP21, GH18]. **Tethys** [LVH⁺18]. **Text** [Aya14, DF00, Mer03, VPO19, Per14b]. **textbook** [Myr15]. **their** [GS12]. **theKompany.com** [Ano01b]. **theoretic** [Boe17]. **Theory**

[GRG21, Cri18, JEC18, MWK⁺20, SSH16]. **Thermal** [ZGL20, TS20]. **thermochemical** [LWV20, WV22]. **Thermochemistry** [LWV20]. **thermodynamic** [Hug18]. **Thermodynamics** [OL17]. **thermoelasticity** [LDW⁺21]. **they're** [LS97]. **things** [McK16, DAJ⁺15]. **Think** [Dow15, Dow09]. **thinking** [HHK⁺09]. **Thomas** [KSB12]. **thoroughly** [BM15]. **Threaded** [Pul00]. **Threading** [MLGW18]. **Threads** [Wei06a]. **Three** [Bea12, MWS18, Ros08]. **Three-Strategy** [MWS18]. **throughput** [GQCP⁺18, OLRLB21]. **tight** [KVSC21]. **tight-binding** [KVSC21]. **Time** [Ano98d, CWM⁺21, JWHS16, KSB12, Wil01, ASAA20, HFB21, LJ19, LDAL20, MWM20, RF16, SGPHD⁺17, TTS⁺10, WMA12]. **tip** [GHT06]. **Tits** [GS12]. **Tk** [Ass96, Bla02, Bla04, McG98c]. **Tkinter** [Ano00b, Wei06b, Gra00]. **TM** [Jac02]. **Today** [Bar21, LS98]. **tomographic** [MMG19]. **tomography** [BYL⁺21, LYX⁺18]. **tongue** [GHT06]. **Too** [RAH⁺01]. **Tool** [BLN⁺21, GMKRS21, HYG16, MH18, VBB18, Bea96, Con95, DPH16, GP22, JM20, Law15, Lot14b, LFT21, LS17, MB17, MWM20, PMBF17, RRRGVD19, SABEH20, SH19b, YKKD19, You08]. **Toolbox** [GRKN⁺19, LWV20, RKR21, SLGB14, BHJ⁺18, GEH19, HPT⁺16, HFF⁺17, MMG19, RSPJ21, Sch21, WPM⁺20]. **Toolchest** [Ang99]. **Toolkit** [CK00, HC16, ISMA18, Jac02, Rem01a, Tal00, War18, BVV22, BMZ⁺18, MD21, Mir18, Ros18, SML06, TCE21, TBJ18, Wie18, WMA⁺22, ASAA20]. **toolkits** [LS98]. **Tools** [Ano00c, Ano01b, Cas17, DGMP09, LeV09, Ano18, CFW17, Gar09, Gun14, Meh15, SW14, Wes15, ESM98, LDAL20, Zie19b]. **TOOLS-23** [ESM98]. **toolset** [LC11]. **top** [Ano20, Cas20, CFSK14]. **top-again** [Cas20]. **Topics** [LT03, RRRGVD19]. **TOPSIS** [YKKD19]. **torcpy** [HBS⁺20]. **Toronto** [USE96]. **total** [Swe14]. **Tour** [Ngu08b, van98a]. **Tracing** [MD15, ABF13, BBH⁺15, HS12, LFT09, PFH⁺16]. **Tracking** [ML16a]. **tradeoffs** [AJJF14, IOC⁺12]. **train** [MK16]. **Training** [Wal07]. **trajectories** [BFT20]. **Transactional** [Ano01b, BRM10, Tab10]. **transcendent** [Ros08]. **transfer** [MPMC21, SAA18]. **transform** [MTS⁺18]. **transformation** [Vai09, Vai14]. **transformations** [LGS10, Tid07]. **transient** [MPMC21]. **Transition** [KBLJ18, MP19a]. **translating** [Men09]. **translation** [AJJF14, GS12]. **Transpiling** [LH20]. **transport** [ABGD⁺20, KPK⁺17, WAN⁺22]. **trapped** [BFT20]. **TRAPping** [Ern99]. **traveltime** [Gir21]. **Traversal** [BSSz⁺20]. **treatment** [SJL18]. **tree** [Mos20a]. **Trees** [SN12, RBV16]. **TreeSwift** [Mos20a]. **trend** [RRRGVD19]. **Trilinos** [Spo12]. **Tromsø** [Eur91]. **ttrcpy** [Gir21]. **Tubular** [ISMA18]. **Tucson** [Ano97d]. **Tuner** [FLR22]. **Tuning** [BE20]. **Tuplex** [SK19]. **TurboGears** [MBW07, RDS07]. **TurboPy** [RGS⁺21]. **turbulent** [ML16b, ML18]. **turn** [Law15]. **Tutorial** [Wat95, vRD05b, Hig03, KD99, SMM⁺22, Sto13, van95d, vRDK99]. **TV** [Wal07]. **Twisted** [FL06, Kin05]. **Twitter** [STS⁺18]. **Two** [Ros08, LS17]. **two-loop** [LS17]. **type** [Men09, RF16, VSS17]. **type-safe** [Men09]. **typed** [BDT13, CEI⁺12, IOC⁺12]. **types** [VSS17]. **typing** [FhDAF09, Sie17, TSD⁺12, VKSB15]. **typy** [OA17]. **U.P** [Lee17]. **u.v.m** [EK08, The09]. **Ubiquitous** [AJH⁺12]. **Übungen** [Wei06a]. **udkm1Dsim** [Sch21]. **Ugly** [Bea09a]. **UI** [Ull15]. **UI/UX** [Ull15]. **UIST** [ACM97]. **UK** [Smi17]. **UKCensusAPI** [Smi17]. **ultrafast** [Sch21]. **ultrashort** [MD22].

umfassende [EK08, EK09]. **Umgang** [DF00]. **Umsteiger** [The09]. **uncertain** [McK16]. **uncertainty** [KMK⁺21, WPM⁺20]. **uncover** [Lot14b]. **undergraduate** [MCGK19, Myr15]. **understand** [Wei15]. **understandability** [ABCV21]. **Understanding** [Gut16, Orb18, BM15]. **Underwater** [GRKN⁺19]. **Undo** [Zuk97]. **unfolding** [BHA18]. **Unicode** [Swi09, Tau16]. **Unification** [AAC⁺98]. **uniform** [MFQ⁺21, PWF17]. **uniformly** [GEH19]. **unit** [LC11, Sal14]. **unit-testing** [LC11]. **units** [GZT⁺18]. **University** [Gve09]. **Unix** [DF00, Eur91, SML06, GJ08, Ngu08e]. **unleash** [Cox14, Gal14, Hia15, MH15, Phi15]. **Unleashed** [MGS07]. **unlock** [Gal14, RO15a]. **Unparametrized** [KSB12]. **Unsupervised** [AVS20]. **Untapped** [Bru09]. **unweighted** [GH18, GHN19]. **unyt** [GZT⁺18]. **Upcrossing** [Pat16]. **Update** [Ano00c, DF21, DFC18, DPF⁺21, Kuc97]. **Updates** [Ano00c, Ano01b, HPT⁺16, LRvE17, PHH⁺12, Yes15]. **uPy** [AJH⁺12]. **USA** [CLT20, HK95, USE00]. **Usage** [MSS⁺19, ZMD21]. **Use** [How06, SJL18, Bea96, HPH12, PAB⁺97, Pop10, Sah15, Tom15]. **use-case** [HPH12]. **used** [Wei15]. **useful** [Dah18a]. **User** [ACM97, Ano01a, Cha01, DF00, GRG21, SJL18, BCM21, GPP⁺21, Mac91, Mac92a, MTS⁺18]. **user-friendly** [BCM21, GPP⁺21]. **Using** [AMGM20, APS10, Bie97, Bis01, BCG05, CL06, CSRV13, Cot03, DD15, Est01, GAS⁺16, Gut13, Gut16, HLSØ06, HAB⁺20, HS13, IG19, Jan10, KJ15, LM03, Lut99, MSL⁺07, Orb18, RM19, SBC⁺17, SJK⁺21, TT21, Vir16, XMW10, Ada14, Ber13, BS21, BWMS22, BB17, CV15, CKK⁺13, CBB14, Cox14, Dan18a, FMPS17, Gar09, GFB⁺14, Gup15, Hia15, HCPF95, Jos15, Kar14, Lan13, Len15, Lot14b, Lot15b, MS15, Meh15, MH15, Myr15, Nel15, Nil07b, OLRLB21, Pal14, Pay11, Per14b, RDS07, RJAL09, RZ09, RK19, SCAK⁺19, SL21, Sha03, SMM⁺22, Tab10, Ull15, Wes15, Wil05, Zac15]. **Utilities** [RKR21, Ras18]. **Utility** [CHG⁺16, DBdFdSR21, Ano12]. **utilize** [Bah15, SW15]. **utilizing** [LC11]. **UX** [Ull15].

V [Orb18, MMEH08]. **V2X** [SYGY21]. **Validation** [Pre03]. **valued** [SABEh20]. **values** [MTS⁺18, SL21]. **VaMpy** [DB17]. **VanderPlas** [Ish17]. **Variables** [KJ14, Wit15]. **Variational** [Ble20]. **Vascular** [ISMA18]. **VCF** [HB16]. **VCFPy** [HB16]. **Velocimetry** [ML16a]. **verbosity** [ABCV21]. **Vererbung** [Wei06a]. **Verification** [JPOB20]. **versatile** [BVV22, BKMY03, BKMY04]. **Version** [HQF⁺20]. **Versionen** [DF00]. **via** [CR12, TEG18, YHX22]. **Video** [Wal07, SGPHD⁺17]. **Video-Training** [Wal07]. **vielen** [The09]. **Viewer** [Ano00c]. **Vine** [YH21]. **Violent** [O’C13, Ano13]. **Virtual** [MRG18, UVa95, MRG17, PFH⁺16, BE20]. **vision** [Jos15, MH15]. **VisTrails** [TGEA09]. **Visual** [Ano01b, Feh02, Vai09, Vai14, YPB16, SW14]. **Visualization** [APS10, IG19, XL18, Ada14, DDK19, MTPHH18, Ros13, Ros14, Sal18, SML06, Vai09, Vai14]. **visualize** [MB17, SML06]. **vital** [RO15a]. **VizGen** [YPB16]. **voltages** [JM20]. **vorbereiten** [DF00]. **voxel** [LDAL20]. **voxel-based** [LDAL20]. **VPython** [SDS00]. **VR** [UVa95]. **vs** [MD15, Ram18b, WX18]. **VTK** [SML06].

w [Lip21]. **Wacky** [RAH⁺01]. **waLBerla** [BSG⁺16]. **Want** [Wil02]. **wanted** [Ano20]. **Warps** [Wil01]. **Washington** [CI96]. **Water** [LVH⁺18]. **wave** [MAC⁺21, Wet20]. **wavefunction** [HPT⁺16]. **wavefunctions** [CFSK14]. **way** [Tos09]. **ways** [Sla15].

Wearable [Cas17]. **Weather** [HC16]. **Web** [EK08, Mit15, Seg07, Buc15, CS21, CV15, Dal07, Gar09, Gup15, HF06, Nai14, Pip15, sR11, Rus14, Swi09, Ang00a, Ano00c, CB96, FBC09, HGMC⁺97, Hig03, HKM08, KL97, MBW07, RDS07, Sal18, TSC02]. **web-based** [CS21, Ang00a]. **Web-Programmierung** [EK08]. **WebWriter** [CB96]. **weighted** [GH18, GHN19]. **WEKA** [BHF16]. **WekaPyScript** [BHF16]. **well** [Cha15, LRvE17]. **well-done** [LRvE17]. **Where** [Wat95]. **Which** [Sit02]. **Whisker** [HYG16]. **Who** [STS⁺18, Wat95]. **whole** [Ano98e]. **wide** [MTPHH18, Sar14]. **Widgets** [Tro96b]. **Win32** [HR00, Ano00a]. **wind** [RC18]. **window** [Rem01b]. **Windows** [DF00, SML06, Ano00c, HR00]. **windrose** [RC18, RC18]. **WIP** [MDRN18]. **Wireless** [Ago01]. **wish** [Ano20]. **Withdrawals** [LVH⁺18]. **within** [TGEA09]. **Without** [BUS21, BRM10]. **Wits** [HRS06, SG07, SL08]. **WordPress** [BP17]. **work** [Boe17]. **workbench** [Hos14]. **Workflow** [IG19]. **workflows** [TBA⁺17]. **Working** [HC16, Ano18, CFW17, RG18]. **Workshop** [Ano97d, CI96, Ass96]. **workspaces** [GG21]. **World** [VCR17, BCRS15, GHT08, Gup15, Jos15, Jos16, Kar14, Lot14a, Mad15, McK16, Sar14, VSS17]. **Worlds** [Hug97]. **Worrying** [Wit21]. **Wrangling** [KJ15]. **Wrapper** [LD07, Tan01, GWM18]. **write** [Sla15]. **Writing** [Mit00, Van97b, VMFG17, HB16, LFT09, VAP⁺21]. **written** [CWLG⁺21, Dah18a, Huc18]. **WSG** [Gar09]. **wxPython** [Tal00].

X [CG17, Tro96a]. **X-ray** [CG17]. **xarray** [HH17]. **XDesign** [CG17]. **XDK** [Ano00c]. **XERIS** [Wai21]. **XERIS/APEX** [Wai21]. **XFree86** [DF00]. **XFree86/23.3.6** [DF00]. **XML** [Wei06a, Wei06b, JD02, McG98b, McG98a, McG00, Por03, Tid07, VB08]. **XML-RPC** [Por03]. **xSLHA** [Sta19].

XSLT [Tid07]. **xturtle** [Lin06b]. **xvi** [Lip22].

year [HRS06]. **Years** [Bea12, DF21, Sev15a, Ros08]. **YesSoftware** [Ano01b]. **Young** [Dav21].

Zato [Suc13]. **Zeljko** [Ish17]. **Zelle** [Jan10]. **zfit** [ENCS20]. **Zope** [HAE00, Pel01]. **Zu-griff** [Wei06b].

References

Achtzehnter:1998:ILU

[AAC⁺98] Joachim Achtzehnter, Judy Anderson, Antony Courtney, Doug Cutting, Mark Davidson, Jeanette Figueroa, Ken Fishkin, Scott Hassan, Rob Head, Chris Jacobi, Bill Janssen, Swen Johnson, Dan Larner, Bill Nell, Denis Severson, Bridget Spitznagel, Mike Spreitzer, Mark Stefik, Martin von Löwis, Farrell Wymore, and Rick Yardumian. Interlanguage unification. Technical Report ??, Xerox Palo Alto Research Center, Palo Alto, CA, USA, May 12, 1998. URL <ftp://ftp.parc.xerox.com/pub/ilu/ilu.html>. The ILU system can be used from C++, Common Lisp, Guile, Java, Modula-3, Perl, Python, Scheme, and Standard C.

Arnold:1997:HDO

[ABC97] David Arnold, Andy Bond, and Martin Chilvers. Hector: Distributed objects in Python. *Dr. Dobb's Sourcebook*, ??(??): ??, January/February 1997.

- ISSN 1077-9019. URL http://www.ddj.com/ddsbk/1997/1997_01/arno.htm. [ABS20]
- Ardito:2021:ERC**
- [ABCV21] Luca Ardito, Luca Barbato, Riccardo Coppola, and Michele Valsesia. Evaluation of Rust code verbosity, understandability and complexity. *PeerJ Computer Science*, 7:e406:1–e406:33, February 2021. ISSN 2167-8359.
- Ardo:2013:LAO**
- [ABF13] Håkan Ardö, Carl Friedrich Bolz, and Maciej Fijałkowski. Loop-aware optimizations in PyPy’s tracing JIT. *ACM SIGPLAN Notices*, 48(2):63–72, February 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- AlAtoum:2020:ETG**
- [ABGD⁺20] B. Al Atoum, S. F. Biagi, D. González-Díaz, B. J. P. Jones, and A. D. McDonald. Electron transport in gaseous detectors with a Python-based Monte Carlo simulation code. *Computer Physics Communications*, 254(??):Article 107357, September 2020. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465520301533>. [Ada14]
- Alenaizan:2020:PIR**
- Asem Alenaizan, Lori A. Burns, and C. David Sherrill. Python implementation of the restrained electrostatic potential charge model. *International Journal of Quantum Chemistry*, 120(2):e26035:1–e26035:??, January 15, 2020. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).
- ACM:1992:PAC**
- ACM, editor. *Proceedings of the 1992 ACM Conference on Lisp and Functional Programming: papers presented at the conference, San Francisco, California, June 22–24, 1992*. ACM Press, New York, NY 10036, USA, 1992. ISBN 0-89791-483-X, 0-89791-481-3. LCCN QA76.73.L23A26 1992. Also published as *LISP Pointers*, vol. V, no. 1, January-March, 1992. ACM order no. 552920.
- ACM:1997:PAS**
- ACM, editor. *Proceedings of the ACM Symposium on User Interface Software and Technology. 10th Annual Symposium. UIST ’97: Banff, Alberta, Canada, 14–17 October 1997*. ACM Press, New York, NY 10036, USA, 1997. ISBN 0-89791-881-9. LCCN ????
- Adams:2014:LPD**
- Chad Adams. *Learning Python data visualization*.

- master how to build dynamic HTML5-ready SVG charts using Python and the pygal library*. Community Experience Distilled. Packt Publishing, Birmingham, UK, 2014. ISBN 1-78355-333-2, 1-78355-334-0 (e-book). iii + 195 pp. LCCN QA76.73.P98. [AJH⁺12] URL <http://proquest.tech.safaribooksonline.de/9781783553334>. ■
- Aranega:2021:RGT**
- [ADP21] Vincent Aranega, Julien Delplanque, and Guillermo Polito. Rotten green tests in Java, Pharo and Python. *Empirical Software Engineering*, 26(6):??, November 2021. CODEN ESENFV. ISSN 1382-3256 (print), 1573-7616 (electronic). URL <https://link.springer.com/article/10.1007/s10664-021-10016-2>. [AJJF14]
- Ahrari:2022:PPF**
- [AES⁺22] Ali Ahrari, Saber Elsayed, Ruhul Sarker, Daryl Essam, and Carlos A. Coello Coello. PyDDRBG: a Python framework for benchmarking and evaluating static and dynamic multimodal optimization methods. *SoftwareX*, 17(??):??, January 2022. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021001850>. [AJYH18]
- Agoren:2001:KKL**
- [Ago01] Izzet Agoren. Kernel kornet: Linux teleconferencing: Improving the wireless network. *Linux journal*, 85:24, 26, 28, 30, May 2001. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic). See erratum [Ano01a].
- Autin:2012:UUC**
- Ludovic Autin, Graham Johnson, Johan Hake, Arthur Olson, and Michel Sanner. uPy: a ubiquitous CG Python API with biological-modeling applications. *IEEE Computer Graphics and Applications*, 32(5):50–61, September/October 2012. CODEN ICGADZ. ISSN 0272-1716 (print), 1558-1756 (electronic).
- Arabas:2014:FTB**
- Sylwester Arabas, Dorota Jarecka, Anna Jaruga, and Maciej Fijalkowski. Formula translation in Blitz++, NumPy and modern Fortran: A case study of the language choice tradeoffs. *Scientific Programming*, 22(3):201–222, ???? 2014. CODEN SC�PEV. ISSN 1058-9244 (print), 1875-919X (electronic).
- AlKadi:2018:GPC**
- Muhammed Al Kadi, Benedikt Janssen, Jones Yudi, and Michael Huebner. General-purpose computing with soft GPUs on FPGAs. *ACM Transactions on Reconfigurable Technology and Systems (TRETs)*, 11(1):5:1–5:??, March 2018. CODEN ????

ISSN 1936-7406 (print), 1936-7414 (electronic).

Alchin:2009:PD

- [Alc09] Marty Alchin. *Pro Django*. Springer eBook Collection Professional and Applied Computing [Dig. Serial]; Springer-12059 [Dig. Serial]. Apress, Berkeley, CA, USA, 2009. ISBN 1-4302-1048-6. ????. pp. LCCN ????

Alnaes:2010:ESC

- [AM10] Martin Sandve Alnæs and Kent-André Mardal. On the efficiency of symbolic computations combined with code generation for finite element methods. *ACM Transactions on Mathematical Software*, 37(1):6:1–6:26, January 2010. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

Abi-Mansour:2019:POO

- [AM19] Andrew Abi-Mansour. PyGran: an object-oriented library for DEM simulation and analysis. *SoftwareX*, 9(??):168–174, January/June 2019. CODEN ????. ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711018301080>.

Arrigoni:2021:SPP

- [AM21] Marco Arrigoni and Georg K. H. Madsen. *Spinney*: Post-processing of first-principles calculations of point defects in

semiconductors with Python. *Computer Physics Communications*, 264(??):Article 107946, July 2021. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465521000709>.

Andreadi:2021:PSS

- [AME+21] Nikolai Andreadi, Artem Mitrofanov, Artem Eliseev, Petr Matveev, Stepan Kalmykov, and Vladimir Petrov. PyRad: A software shell for simulating radiolysis with Qball package. *Journal of Computational Chemistry*, 42(13):944–950, May 15, 2021. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).

Aguirre-Mesa:2020:MLC

- [AMGM20] Andres M. Aguirre-Mesa, Manuel J. Garcia, and Harry Millwater. MultiZ: a library for computation of high-order derivatives using multicomplex or multidimensional numbers. *ACM Transactions on Mathematical Software*, 46(3):23:1–23:30, September 2020. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL <https://dl.acm.org/doi/10.1145/3378538>.

Aumasson:2014:HFB

- [AMPH14] Jean-Philippe Aumasson, Willi Meier, Raphael C.-W. Phan, and Luca Henzen. *The Hash Function BLAKE*. Information

- Security and Cryptography. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 3-662-44756-8 (print), 3-662-44757-6 (e-book). ISSN 1619-7100 (print), 2197-845X (electronic). xviii + 228 + 18 pp. LCCN QA76.9.H36 A96 2014.
- [Ang99] Kirby W. Angell. Programmer's toolchest: Examining JPython: a Java test engine puts Python to the test. *Dr. Dobb's Journal of Software Tools*, 24(4):78, 81–83, April 1999. CODEN DDJOEB. ISSN 1044-789X. URL http://www.ddj.com/ftp/1999/1999_04/jpython.txt; http://www.ddj.com/ftp/1999/1999_04/jpython.zip.
- [Ang00a] Cheng-Chai Ang. A Web-based lunch ordering system. *Linux journal*, 79:176–??, November 2000. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).
- [Ang00b] Kirby W. Angell. Python server pages: Part 1. *Dr. Dobb's Journal of Software Tools*, 25(1):44, 46–47, 50, January 2000. CODEN DDJOEB. ISSN 1044-789X. URL http://www.ddj.com/ftp/2000/2000_01/psp1.txt; http://www.ddj.com/ftp/2000/2000_01/psp100.zip.
- [Ang00c] Kirby W. Angell. Python server pages: Part II. *Dr. Dobb's Journal of Software Tools*, 25(2):54, 57–61, February 2000. CODEN DDJOEB. ISSN 1044-789X. URL http://www.ddj.com/ftp/2000/2000_02/psp2.txt.
- [Ano95] Anonymous. NIST investigates Python programming language. *Journal of research of the National Institute of Standards and Technology*, 100(1):101, January/February 1995. CODEN JRITEF. ISSN 1044-677X (print), 2165-7254 (electronic). URL <http://nvl.nist.gov/pub/nistpubs/jres/jrescont.pdf>.
- [Ano97a] Anonymous. Book review: *Programming Python*. By Mark Lutz. O'Reilly, Sebastopol, CA. (1996). 880 pages. \$44.95. *Computers and Mathematics with Applications*, 33(5):132, March 1997. CODEN CMAPDK. ISSN 0898-1221 (print), 1873-7668 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0898122197829525>.
- [Ano97b] Anonymous. Book review: Internet Programming with

Angell:2000:PSPb

Angell:1999:PTE

Anonymous:1995:NIP

Ang:2000:WBL

Anonymous:1997:BRPe

Angell:2000:PSPa

Anonymous:1997:BRI

- Python. *Linux journal*, 42: ??, October 1997. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic). URL <http://www.linuxjournal.com/2152.html>. ■
- [Ano97c] **Anonymous:1997:PIP**
 Anonymous, editor. *Proceedings of the 6th International Python Conference: October 14-17, 1997, San Jose, California*. Corporation for National Research Initiatives, 1895 Preston White Drive, Suite 100, Reston, VA 20191, USA, 1997. ISBN ????. LCCN ????
- [Ano97d] **Anonymous:1997:PWM**
 Anonymous, editor. *Proceedings of the Workshop on Management of Semi-Structured Data: Tucson, Arizona, May 16, 1997*. ????, ????, 1997. ISBN ????. LCCN ????
- [Ano98a] **Anonymous:1998:P**
 Anonymous. Python. *Web Review*, ??(??):??, April 10, 1998. URL <http://webreview.com/wr/pub/freeware/python.html>. ■
- [Ano98b] **Anonymous:1998:PDA**
 Anonymous. The Python DB-API. *Linux journal*, ??(??):??, April 1998. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic). URL <http://www.ssc.com/lj/>.
- [Ano98c] **Anonymous:1998:PEL**
 Anonymous. Python extensions: LLNL-distributed extensions. Technical Report UCRL-128569, Lawrence Livermore National Laboratory, Livermore, CA, USA, 1998. URL <http://xfiles.llnl.gov/python.htm>. Includes Numerical Python, Python/Pact-PDB interface, PyGraphics, PyHistory, RNG (random number generator), CXX_Objects (Python extensions in C++).
- [Ano98d] **Anonymous:1998:SLG**
 Anonymous. Scripting languages go prime time. *Software Development magazine*, ??(??): ??, April 1998. URL <http://www.sdmagazine.com>. Discusses Python, Perl, and Tcl.
- [Ano98e] **Anonymous:1998:WPF**
 Anonymous. The whole Python FAQ. Technical report, Corporation for National Research Initiatives, 1895 Preston White Drive, Suite 100, Reston, VA 20191, USA, 1998. URL <http://www.python.org/doc/FAQ.html>. For Python Release 1.5.1.
- [Ano00a] **Anonymous:2000:BRPf**
 Anonymous. Book review: *Python programming on Win32*. ■ By Mark Hammond and Andy Robinson. O'Reilly, Sebastopol, CA. (2000). 652 pages. \$34.95. *Computers and Mathematics with Applications*, 40(2-3):418, July/August 2000. CODEN

CMAPDK. ISSN 0898-1221 (print), 1873-7668 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0898122100901974>.

Anonymous:2000:BRLb

[Ano00b]

Anonymous. Book reviews: Linux Programmer's Reference Second Edition by Ibrahim F. Haddad; Python and Tkinter Programming by Phil Hughes; sendmail for Linux by Russell J. T. Dyer. *Linux journal*, 77:??, September 2000. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic). URL <http://noframes.linuxjournal.com/lj-issues/issue77/3861.html>; <http://noframes.linuxjournal.com/lj-issues/issue77/3989.html>; <http://noframes.linuxjournal.com/lj-issues/issue77/4184.html>.

Anonymous:2000:POR

[Ano00c]

Anonymous. Products: Oracle releases XDK update; Starbase's code editing system; Arc Second's palm PC CAD viewer; Minolta's network document server for Windows 2000; Borland's Java development tools for Palm OS; Rational's code management tools; Blaxxun Interactive's Web communications platform tools; Informix Software's Linux database engine; ActiveState updates free Python distribution; KDE 2.0 released. *Computer*, 33(12):144-

146, December 2000. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic). URL <http://dlib.computer.org/co/books/co2000/pdf/rz144.pdf>.

Anonymous:2001:EIA

[Ano01a]

Anonymous. Errata: Izzet Agoren's Kernel Corner, May 2001, Mitch Chapman's "Create User Interfaces with Glade" (July 2001). *Linux journal*, 89:6, September 2001. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic). See [Ago01, Cha01].

Anonymous:2001:PPS

Anonymous. Products: ProxySource's software design and collaboration application; YesSoftware's code generation application; Persistence Software's transactional application server; Instantiation's Java productivity tools; JCanvas visual rapid application IDE; theKompany.com's Python development environment; NeuVis updates E-business visual modeling tools; LegacyJ's Java-compliant Cobol compiler. *Computer*, 34(3):108-109, March 2001. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic). URL <http://dlib.computer.org/co/books/co2001/pdf/r3108.pdf>.

- [Ano02] **Anonymous:2002:CPF**
 Anonymous. Correction: “Python and Finite Elements”. *Dr. Dobb’s Journal of Software Tools*, 27(4-4):10, April 2002. CODEN DDJOEB. ISSN 1044-789X. URL <http://www.ddj.com/>. See [Ple02].
- [Ano12] **Anonymous:2012:PSR**
 Anonymous. Python scripts as a replacement for `bash` utility scripts. *Linux journal*, 2012(223):1:1-1:??, November 2012. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).
- [Ano13] **Anonymous:2013:BRV**
 Anonymous. Book review: *Violent Python*, by T. J. O’Connor. Syngress. ISBN 978-1-59749-957-6. *Network Security*, 2013(6):4, June 2013. CODEN NTSCF5. ISSN 1353-4858 (print), 1872-9371 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1353485813700679>.
- [Ano14] **Anonymous:2014:BRP**
 Anonymous. Book review: *Python Forensics*, Chet Hosmer, Syngress. ISBN 978-0-12-418676-7 (print), 978-0-12-418683-5 (e-book). *Network Security*, 2014(9):4, September 2014. CODEN NTSCF5. ISSN 1353-4858 (print), 1872-9371 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S135348581470087X>.
- [Ano15a] **Anonymous:2015:BRB**
 Anonymous. Book review: *Black Hat Python*, Justin Seitz. No Starch Press. ISBN 978-1-59327-590-7. *Network Security*, 2015(4):4, April 2015. CODEN NTSCF5. ISSN 1353-4858 (print), 1872-9371 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1353485815300258>.
- [Ano15b] **Anonymous:2015:BRD**
 Anonymous. Book review: *Doing Math With Python*, Amit Saha. No Starch Press. ISBN 978-1-59327-640-9. *Network Security*, 2015(10):4, October 2015. CODEN NTSCF5. ISSN 1353-4858 (print), 1872-9371 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S135348581530088X>.
- [Ano18] **Anonymous:2018:PCC**
 Anonymous. `ChebTools`: C++11 (and Python) tools for working with Chebyshev expansions. *Journal of Open Source Software*, 3(22):569:1-569:3, February 2018. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00569>.
- [Ano19] **Anonymous:2019:PSS**
 Anonymous. Profile: Scott Shawcroft: This developer is

- squeezing Python into micro-controllers. *IEEE Spectrum*, 56(4):16, April 2019. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic). [Anoxxc]
- [Ano20] **Anonymous:2020:SWS**
Anonymous. Skills wanted: Sql, Java, Python, and AWS top employers' wish lists — [careers]. *IEEE Spectrum*, 57(1):59, January 2020. CODEN IEESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).
- [Ano21] **Anonymous:2021:RCR**
Anonymous. Replication of computational results report for “Doping Tests for Cyber-Physical Systems”. *ACM Transactions on Modeling and Computer Simulation*, 31(3): 17:1–17:2, July 2021. CODEN ATMCEZ. ISSN 1049-3301 (print), 1558-1195 (electronic). URL <https://dl.acm.org/doi/10.1145/3459667>. [APS10]
- [Anoxxa] **Anonymous:20xx:PP**
Anonymous. The Python papers. Web site, 20xx. ISSN 1834-3147. URL <http://pythonpapers.org/tpp.html>.
- [Anoxxb] **Anonymous:20xx:PPA**
Anonymous. Python papers anthology. Web site, 20xx. URL <http://pythonpapers.org/>.
- Anonymous:20xx:PPM**
Anonymous. Python papers monograph. Web site, 20xx. URL <http://pythonpapers.org/tppm.html>.
- Anonymous:20xx:PPS**
Anonymous. Python papers source codes. Web site, 20xx. ISSN 1836-621X. URL <http://pythonpapers.org/tppsc.html>.
- [Ant15] **Antao:2015:BPC**
Tiago Antao. *Bioinformatics with Python cookbook*. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78217-511-3, 1-78355-865-2 (e-book). 306 (est.) pp. LCCN QA76.73.P98 .A583 2015.
- [Anderson:2010:UPS] **Anderson:2010:UPS**
Erik W. Anderson, Gilbert A. Preston, and Claudio T. Silva. Using Python for signal processing and visualization. *Computing in Science and Engineering*, 12(4):90–95, July/August 2010. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).
- [Arb14] **Arbuckle:2014:LPT**
Daniel Arbuckle. *Learning Python testing: a straightforward and easy approach to testing your Python projects*. Community experience distilled. Packt Publishing, Birmingham, UK, second edition, 2014.

ISBN 1-78355-321-9, 1-78355-322-7. v + 180 pp. LCCN QA76.73.P98 A728 2014.

Ahmadzadeh:2020:MDT

[ASAA20]

Azim Ahmadzadeh, Kankana Sinha, Berkay Aydin, and Rafal A. Angryk. *MVTS-Data Toolkit: a Python package for preprocessing multivariate time series data*. *SoftwareX*, 12(??):Article 100518, July/December 2020. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020300157>.

[AW06]

USENIX:1996:ATT

[Ass96]

USENIX Association, editor. *4th Annual Tcl/Tk Workshop '96, July 10-13, 1996. Monterey, CA*. USENIX, Berkeley, CA, USA, July 10-13, 1996. ISBN 1-880446-78-2. LCCN QA76.73.T44 T44 1996.

[ÅW16]

Ahsen:2020:RPS

[AVS20]

Mehmet Eren Ahsen, Robert Vogel, and Gustavo A. Stolovitzky. **R/PY-SUMMA: an R/Python package for unsupervised ensemble learning for binary classification problems in bioinformatics**. *Journal of Computational Biology*, 27(9):1337-1340, September 2020. CODEN JCOBEM. ISSN 1066-5277 (print), 1557-8666 (electronic). URL <https://www.liebertpub.com/doi/abs/10.1089/cmb.2019.0348>; <https://www.liebertpub.com/doi/pdf/10.1089/cmb.2019.0348>.

[AWO⁺21]

[com/doi/pdf/10.1089/cmb.2019.0348](http://www.liebertpub.com/doi/pdf/10.1089/cmb.2019.0348).

Andersson:2006:PSN

Mats Andersson and Robert Wedin. *Python scripting for network management: PyMIP-TeMIP made simple*. Examensarbete, Höskoleingenjörprogrammet. Luleå tekniska universitet, Skellefteå, Sweden, 2006. ISSN 1404-5494. URL <http://epubl.ltu.se/1404-5494/2006/043/>; <http://epubl.ltu.se/1404-5494/2006/043/LTU-HIP-EX-06043-SE.pdf>.

Aakerblom:2016:MPP

Beatrice Åkerblom and Tobias Wrigstad. *Measuring polymorphism in Python programs*. *ACM SIGPLAN Notices*, 51(2):114-128, February 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Aksman:2021:PPI

Leon M. Aksman, Peter A. Wijeratne, Neil P. Oxtoby, Arman Eshaghi, Cameron Shand, Andre Altmann, Daniel C. Alexander, and Alexandra L. Young. *pySuStaIn: a Python implementation of the Subtype and Stage Inference algorithm*. *SoftwareX*, 16(??):??, December 2021. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/doi/pdf/10.1089/cmb.2021.0348>.

- com/science/article/pii/S2352711021001096.
- [Aya14] Eric Ayars. Finally, a Python-based computational physics text. *Computing in Science and Engineering*, 16(1): 6–7, January/February 2014. CODEN CSENF. ISSN 1521-9615.
- [AZLY18] Uri Alon, Meital Zilberstein, Omer Levy, and Eran Yahav. A general path-based representation for predicting program properties. *ACM SIGPLAN Notices*, 53(4):404–419, April 2018. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- [BA14] J. Burton Browning and Marty Alchin. *Pro Python*. The expert’s voice in Python. Apress, Berkeley, CA, USA, second edition, 2014. ISBN 1-4842-0335-6, 1-4842-0334-8 (e-book). LCCN QA76.73.P98.
- [Bac07] Arnd Bäcker. Computational physics education with Python. *Computing in Science and Engineering*, 9(3): 30–33, May/June 2007. CODEN CSENF. ISSN 1521-9615 (print), 1558-366X (electronic).
- [Bad20] Antonio Badia. *SQL for Data Science*. Data-Centric Systems and Applications. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2020. ISBN 3-030-57591-8, 3-030-57592-6 (e-book), 3-030-57593-4. ISSN 2197-9723 (print), 2197-974X (electronic). xi + 285 + 16 pp. URL <http://www.springerlink.com/content/978-3-030-57592-2>.
- [Bah15] Karim Bahgat. *Python geospatial development essentials: utilize Python with open source libraries to build a lightweight, portable, and customizable GIS desktop application*. Community experience distilled. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78217-540-7, 1-78217-441-9 (e-book). 192 (est.) pp. LCCN QA76.73.P98. URL <http://proquest.safaribooksonline.com/?fpi=9781782175407>.
- [Bai08] Yves Bailly. *Initiation à la programmation avec Python et C++*. Pearson Education France, Paris, France, 2008. xi + 255 pp. LCCN ????
- [Bal12] Doug Baldwin. Special projects grants awarded. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science*

- Education*), 44(3):6, July 2012. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic).
- [Bal18] Ivo Balbaert. *Julia 1.0 Programming*. Packt Publishing, Birmingham, UK, 2018. ISBN 1-78899-909-6. iv + 184 pp. LCCN QA76.73.J85 2018. URL <http://international.scholarvox.com/book/88863229>. ■
- [Bar11] Paul Barry. Python for Android. *Linux journal*, 2011 (203):1:1-1:??, March 2011. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).
- [Bar21] Lorena A. Barba. The Python/Jupyter ecosystem: Today's problem-solving environment for computational science. *Computing in Science and Engineering*, 23(3):5-9, May/June 2021. CODEN CSENF. ISSN 1521-9615 (print), 1558-366X (electronic).
- [Bar22] Erik Bartos. Numerical multidimensional integration with PyMikor. *Computer Physics Communications*, 270 (??):Article 108149, January 2022. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465521002617>.
- [Bas08] Sebastian Bassi. *Python for bioinformatics*. Chapman and Hall/CRC mathematical and computational biology series. Chapman and Hall/CRC, Boca Raton, FL, USA, 2008. ISBN 1-58488-929-2 (paperback). ???? pp. LCCN ????
- [Bas10] Sebastian Bassi. *Python for bioinformatics*. Chapman and Hall/CRC mathematical and computational biology series. CRC Press, 2000 N.W. Corporate Blvd., Boca Raton, FL 33431-9868, USA, 2010. ISBN 1-58488-929-2 (paperback). xxv + 584 pp. LCCN QH324.2 .B387 2010.
- [Bau96] Jeff Bauer. An introduction to Python. *Linux journal*, 21:??, January 1996. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).
- [Bax01] Michael Baxter. Book reviews: *Core Python Programming*. *Linux journal*, 85:100-101, May 2001. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic). URL <http://noframes.linuxjournal.com/lj-issues/issue85/4564.html>. ■

- [BB17] **Bonetta:2017:FJF**
 Daniele Bonetta and Matthias Brantner. FAD.js: fast JSON data access using JIT-based speculative optimizations. *Proceedings of the VLDB Endowment*, 10(12):1778–1789, August 2017. CODEN ???? ISSN 2150-8097.
- [BB22] **Bragagnolo:2022:SPL**
 Andrea Bragagnolo and Carlo Alberto Barbano. Simplify: a Python library for optimizing pruned neural networks. *SoftwareX*, 17(??):??, January 2022. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021001576>. [BC09]
- [BBB02] **Baumgartner:2002:DIP**
 Florian Baumgartner, Torsten Braun, and Bharat Bhargava. Design and implementation of a python-based active network platform for network management and control. *Lecture Notes in Computer Science*, 2546:177–??, 2002. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic). URL <http://link.springer.de/link/service/series/0558/bibs/2546/25460177.htm>; <http://link.springer.de/link/service/series/0558/papers/2546/25460177.pdf>. [BCG05]
- [BBH⁺15] **Bauman:2015:PTJ**
 Spenser Bauman, Carl Friedrich Bolz, Robert Hirschfeld, Vasily Kirilichev, Tobias Pape, Jeremy G. Siek, and Sam Tobin-Hochstadt. Pycket: a tracing JIT for a functional language. *ACM SIGPLAN Notices*, 50(9):22–34, September 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- Boland:2009:IPD**
 Michael G. Boland and Curtis Clifton. Introducing Py-Lighter: dynamic code highlighter. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 41(1):489–493, March 2009. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic). Proceedings of SIGCSE '09.
- Bezanson:2018:JDP**
 Jeff Bezanson, Jiahao Chen, Benjamin Chung, Stefan Karpinski, Viral B. Shah, Jan Vitek, and Lionel Zoubritzky. Julia: dynamism and performance reconciled by design. *Proceedings of the ACM on Programming Languages (PACMPL)*, 2(OOPSLA):120:1–120:23, October 2018. URL <https://dl.acm.org/doi/abs/10.1145/3276490>.
- Broker:2005:UPL**
 Oliver Bröker, Oscar Chinellato, and Roman Geus. Using Python for large scale linear algebra applications. *Future Generation Computer*

Systems, 21(6):969–979, June 2005. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). [BDF+20]

Barrachina:2021:PUF

[BCM21] Sergio Barrachina, Adrián Castelló, and Jose I. Mestre. PyDTNN: A user-friendly and extensible framework for distributed deep learning. *The Journal of Supercomputing*, 77(9):9971–9987, September 2021. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic). URL <https://link.springer.com/article/10.1007/s11227-021-03673-z>.

Balbaert:2015:GSJ

[BCRS15] Ivo Balbaert, Kevin Colaco, Neeshma Ramakrishnan, and Rashmi Sawant, editors. *Getting started with Julia programming: enter the exciting world of Julia, a high-performance language for technical computing*. Community Experience Distilled. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78328-479-X, 1-78328-480-3 (e-book). 214 pp. LCCN QA297 .B353 2015eb. URL <http://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=1973847>; <http://site.ebrary.com/id/11025933>; <http://www.vlebooks.com/vleweb/product/openreader?id=none%26isbn=9781783284801>. [BE20]

Barkley:2020:HMP

S. Barkley, T. G. Dimiduk, J. Fung, D. M. Kaz, V. N. Manoharan, R. McGorty, R. W. Perry, and A. Wang. Holographic microscopy with Python and HoloPy. *Computing in Science and Engineering*, 22(5):72–82, 2020. CODEN CSENF. ISSN 1521-9615 (print), 1558-366X (electronic).

Bolz:2013:SSC

Carl Friedrich Bolz, Lukas Diekmann, and Laurence Tratt. Storage strategies for collections in dynamically typed languages. *ACM SIGPLAN Notices*, 48(10):167–182, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.

Boeira:2020:PPP

Emerson Boeira and Diego Eckhard. `pyvrft`: a Python package for the Virtual Reference Feedback Tuning, a direct data-driven control method. *SoftwareX*, 11(??):Article 100383, January/June 2020. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711019302894>.

- [Bea96] **Beazley:1996:SEU**
 D. M. Beazley. SWIG: an easy to use tool for integrating scripting languages with C and C++. In Association [Ass96], pages 129–139. ISBN 1-880446-78-2. LCCN QA76.73.T44 T44 1996.
- [Bea98] **Beazley:1998:SAC**
 David Beazley. SWIG and automated C/C++ scripting extensions. *Dr. Dobbs' Journal of Software Tools*, 23(2): 30, 32, 34–36, 100, February 1998. CODEN DDJOEB. ISSN 1044-789X.
- [Bea00] **Beazley:2000:PER**
 David M. Beazley. *Python essential reference*. New Riders professional library. New Riders Publishing, Carmel, IN, USA, 2000. ISBN 0-7357-0901-7. xviii + 319 pp. LCCN QA76.73.P98 B43 2000.
- [Bea01] **Beazley:2001:PER**
 David M. Beazley. *Python essential reference*. New Riders Publishing, Carmel, IN, USA, second edition, 2001. ISBN 0-7357-1091-0. xviii + 398 pp. LCCN QA76.73.P98 B43 2001.
- [Bea06] **Beazley:2006:PER**
 David M. Beazley. *Python essential reference*. SAMS Publishing, Indianapolis, IN, USA, third edition, 2006. ISBN 0-672-32862-3 (paperback). xiii + 625 pp. LCCN QA76.73.P98 B43 2006.
- [Bea09a] **Beazley:2009:PGB**
 David Beazley. Python 3: The good, the bad, and the ugly. *login: the USENIX Association newsletter*, 34(2):??, April 2009. CODEN LOGNEM. ISSN 1044-6397. URL <https://www.usenix.org/publications/login/april-2009-volume-34-number-2/python-3-good-bad-and-ugly>.
- [Bea09b] **Beazley:2009:PER**
 David M. Beazley. *Python essential reference*. Addison-Wesley, Reading, MA, USA, fourth edition, 2009. ISBN 0-672-32978-6. xxi + 717 pp. LCCN ????
- [Bea12] **Beazley:2012:TYP**
 David Beazley. Three years of Python 3. *login: the USENIX Association newsletter*, 37(1):??, February 2012. CODEN LOGNEM. ISSN 1044-6397. URL <https://www.usenix.org/publications/login/february-2012/three-years-python-3>.
- [Ben08] **Bennett:2008:PDP**
 James Bennett. *Practical Django projects*. The expert's voice in Web development. Apress, Berkeley, CA, USA, 2008. ISBN 1-59059-996-9. xvii + 237 pp. LCCN TK5105.888.B4512; TK5105.888.B4512 2008.

- [Ber13] **Bernard:2013:RSC**
 Joey Bernard. Running scientific code using IPython and SciPy. *Linux journal*, 2013(228):3:1–3:??, April 2013. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).
- [BFM18] **Brewer:2018:DDN**
 Brendon J. Brewer and Daniel Foreman-Mackey. DNest4: Diffusive nested sampling in C++ and Python. *Journal of Statistical Software*, 86(??):??, 2018. CODEN JSSOBK. ISSN 1548-7660. URL <https://www.jstatsoft.org/index.php/jss/article/view/v086i07>; <https://www.jstatsoft.org/index.php/jss/article/view/v086i07/v86i07.pdf>. [BHA18]
- [BFT20] **Bentine:2020:PLP**
 E. Bentine, C. J. Foot, and D. Trypogeorgos. (py)LIon: a package for simulating trapped ion trajectories. *Computer Physics Communications*, 253(??):Article 107187, August 2020. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465520300369>.
- [BG17] **Batut:2017:PEP**
 Bérénice Batut and Björn Grüning. ENASearch: a Python library for interacting with ENA’s API. *Journal of Open Source Software*, 2(18):418:1, October 2017. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00418>.
- [BH12] **Bell:2012:PSA**
 Nathan Bell and Anil N. Hiran. PyDEC: Software and algorithms for discretization of exterior calculus. *ACM Transactions on Mathematical Software*, 39(1):3:1–3:41, November 2012. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).
- Bourbeau:2018:PPP**
 James Bourbeau and Zigfried Hampel-Arias. PyUnfold: a Python package for iterative unfolding. *Journal of Open Source Software*, 3(26):741:1–741:3, June 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00741>.
- [BHF16] **Beckham:2016:PWC**
 Christopher Beckham, Mark Hall, and Eibe Frank. WekaPyScript: Classification, regression, and filter schemes for WEKA implemented in Python. *Journal of Open Research Software*, 4(1):e33–??, August 08, 2016. CODEN ????? ISSN 2049-9647. URL <https://openresearchsoftware.metajnl.com/articles/10.5334/jors.108/>.

- [Borowka:2018:PTN] S. Borowka, G. Heinrich, S. Jahn, S. P. Jones, M. Kerner, J. Schlenk, and T. Zirke. pySecDec: a toolbox for the numerical evaluation of multi-scale integrals. *Computer Physics Communications*, 222(??):313–326, January 2018. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465517303028>.
- [BHS18] Thomas Brown, Jonas Hörsch, and David Schlachtberger. PyPSA: Python for power system analysis. *Journal of Open Research Software*, 6(1):4–??, January 16, 2018. CODEN ???? ISSN 2049-9647. URL <https://openresearchsoftware.metajnl.com/articles/10.5334/jors.188/>.
- [Bielak:1997:UPG] Richie Bielak. Using Python to generate HTML pages. *Linux Gazette*, 19(??):??, July 1997. URL <http://www.ssc.com/lg/issue19/python.html>.
- [Biekötter:2021:MPP] Thomas Biekötter. munuSSM: a Python package for the μ -from- ν Supersymmetric Standard Model. *Computer Physics Communications*, 264(??):Article 107935, July 2021. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465521000655>.
- [Bis01] Mihai Bisca. Using Python to query MySQL over the net. *Linux journal*, 85:104–106, 108, May 2001. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).
- [BISC14] Tom S. Bertalan, Akand W. Islam, Roger B. Sidje, and Eric S. Carlson. OpenMG: a new multigrid implementation in Python. *Numerical Linear Algebra with Applications*, 21(5):685–700, October 2014. CODEN NLAEM. ISSN 1070-5325 (print), 1099-1506 (electronic).
- [BJ14a] David M. Beazley and Brian K. (Brian Kenneth) Jones. *Python cookbook: Recipes for mastering Python 3*. O’Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol, CA 95472, USA, third edition, 2014. ISBN 1-4493-4037-7 (paperback), 1-4493-5736-9 (e-book). xvi + 687 pp. LCCN QA76.73.P98 B43 2013eb.
- [BJ14b] David M. Beazley and Brian K. (Brian Kenneth) Jones.

- Python. Receptury*. Wydawnictwo Helion, Gliwice, Poland, third edition, 2014. ISBN 1-4920-1351-X (e-book), 1-4920-1350-1, 83-246-8180-9 (print). LCCN QA76.73.P98 B386 2014. URL <http://proquest.safaribooksonline.com/?fpi=9781492013501>. Translation of [BJ14a] to Polish by Tomasz Walczak. [BKL09]
- [BJR⁺20] Daniel D. Brown, Philip Jones, Samuel Rowlinson, Sean Leavey, Anna C. Green, Daniel Töyrä, and Andreas Freise. *Pykat*: Python package for modelling precision optical interferometers. *SoftwareX*, 12(??):Article 100613, July/December 2020. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020303265>. [BKMV03]
- [Bingol:2019:NPO] Onur Rauf Bingol and Adarsh Krishnamurthy. NURBS-python: an open-source object-oriented NURBS modeling framework in Python. *SoftwareX*, 9(??):85–94, January/June 2019. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711018301778>. [BKMV04]
- [BKC14] Stefan Bucur, Johannes Kinder, and George Candea. Prototyping symbolic execution engines for interpreted languages. *ACM SIGARCH Computer Architecture News*, 42(1):239–254, March 2014. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).
- Bird:2009:NLP**
- Steven Bird, Ewan Klein, and Edward Loper. *Natural Language Processing with Python*. O’Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2009. ISBN 0-596-51649-5. 500 (est) pp. LCCN ????
- Blank:2003:PPB**
- Douglas Blank, Deepak Kumar, Lisa Meeden, and Holly Yanco. Pyro: a Python-based versatile programming environment for teaching robotics. *ACM Journal on Educational Resources in Computing (JERIC)*, 3(4):1–15, December 2003. CODEN ???? ISSN 1531-4278.
- Blank:2004:PPB**
- Douglas Blank, Deepak Kumar, Lisa Meeden, and Holly Yanco. Pyro: a python-based versatile programming environment for teaching robotics. *ACM Journal on Educational Resources in Computing (JERIC)*, 4(3):1–15, September 2004. CODEN ???? ISSN 1531-4278.
- Bucur:2014:PSE**

- [BKRT21] **Barba:2021:SCP**
 Lorena A. Barba, Andreas Klöckner, Prabhu Ramachandran, and Rollin Thomas. Scientific computing with Python on high-performance heterogeneous systems. *Computing in Science and Engineering*, 23(4):5–7, July/August 2021. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).
- [BL97a] **Beazley:1997:EMP**
 D. M. Beazley and P. S. Lomdahl. Extensible message passing application development and debugging with Python. In IEEE [IEE97a], pages 650–655. ISBN 0-8186-7793-7. LCCN QA76.58 .I56 1997. IEEE catalog number 97TB100107. IEEE Computer Society Press order number PR07792.
- [BL97b] **Beazley:1997:BFL**
 David M. Beazley and Peter S. Lomdahl. Building flexible large-scale scientific computing applications with scripting languages. In Heath et al. [HTA⁺97], page ????. CODEN PSSCFK. ISBN 0-89871-395-1. LCCN ????? CD-ROM for Windows, Macintosh and UNIX; no paper form published.
- [Bla02] **Blaess:2002:LSS**
 Christophe Blaess. *Langages de scripts sous Linux: Shell Bash, Sed, Awk, Perl, Tcl, Tk, Python, Ruby*. Eyrolles, Paris, France, 2002. ISBN 2-212-11028-6. xx + 733 pp. LCCN QA76.7 B4 2002.
- [Bla04] **Blaess:2004:SSL**
 Christophe Blaess. *Scripts sous Linux: Shell Bash, Sed, Awk, Perl, TCL, Tk, Python, Ruby*. Eyrolles, Paris, France, second edition, 2004. ISBN 2-212-11405-2. xxi + 761 pp. LCCN QA76.76O63; QA76.7.
- [Ble20] **Bleyer:2020:AFR**
 Jeremy Bleyer. Automating the formulation and resolution of convex variational problems: Applications from image processing to computational mechanics. *ACM Transactions on Mathematical Software*, 46(3):27:1–27:33, September 2020. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL <https://dl.acm.org/doi/10.1145/3393881>.
- [BLE21] **Bizzego:2021:MLP**
 Andrea Bizzego, Mengyu Lim, and Gianluca Esposito. `mics-library`: a Python package for reproducible studies on the Multiple Indicator Cluster Survey. *SoftwareX*, 16(??):??, December 2021. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021001187>.

- [BLN⁺21] **Boguslawski:2021:PBB**
 Katharina Boguslawski, Aleksandra Leszczyk, Artur Nowak, Filip Brzek, Piotr Szymon Żuchowski, Dariusz Kedziera, and Paweł Tecmer. Pythonic black-box electronic structure tool (PyBEST). An open-source Python platform for electronic structure calculations at the interface between chemistry and physics. *Computer Physics Communications*, 264(?):Article 107933, July 2021. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465521000643>.
- [BLP⁺21] **Bauer:2021:SPL**
 Michael Bauer, Wonchan Lee, Manolis Papadakis, Marcin Zalewski, and Michael Garland. Supercomputing in Python with Legate. *Computing in Science and Engineering*, 23(4):73–79, July/August 2021. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).
- [BM15] **Boschetti:2015:PDS**
 Alberto Boschetti and Luca Massaron. *Python data science essentials: become an efficient data science practitioner by thoroughly understanding the key concepts of Python*. Community experience distilled. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78528-789-3, 1-78528-042-2. 258 pp. LCCN QA76.73.P98. URL <http://proquest.safaribooksonline.com/?fpi=9781785280429>.
- [BM18] **Brown:2018:PHP**
 Ryan C. Brown and Joshua Moser. HSIImage: a Python and C++ library to allow interaction with ENVI-BIL hyperspectral images. *Journal of Open Source Software*, 3(25):630:1–630:2, May 2018. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00630>.
- [BMK03] **Blank:2003:PRE**
 Douglas Blank, Lisa Meeden, and Deepak Kumar. Python robotics: an environment for exploring robotics beyond LEGOs. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 35(1):317–321, January 2003. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic).
- [BMZ⁺18] **Broberg:2018:PPT**
 Danny Broberg, Bharat Medasani, Nils E. R. Zimmermann, Guodong Yu, Andrew Canning, Maciej Haranczyk, Mark Asta, and Geoffroy Hautier. PyCDT: a Python toolkit for modeling point defects in semiconductors and insulators. *Computer Physics Communications*, 226(?):165–179, May

2018. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0010465518300079>. [BP17]
- [Boe17] Geoff Boeing. **OSMnx: a Python package to work with graph-theoretic OpenStreetMap street networks.** *Journal of Open Source Software*, 2(12):215:1–215:4, April 2017. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00215>. [Bra13]
- [Bor07] P. H. Borchers. **Python: a language for computational physics.** *Computer Physics Communications*, 177(1–2):199–201, July 2007. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465507000732>. [Br10]
- [Bow15] Michael Bowles. *Machine learning in Python: essential techniques for predictive analysis*. Wiley, New York, NY, USA, 2015. ISBN 1-118-96174-9 (paperback), 1-119-18360-X (e-book), 1-118-96176-5 (e-book), 1-118-96175-7 (e-book). xxix + 326 pp. LCCN Q325.5. [Bri06]
- Barrios:2017:DIG**
David Barrios and Carlos Prieto. **D3GB: an interactive genome browser for R, Python, and WordPress.** *Journal of Computational Biology*, 24(5):447–449, May 2017. CODEN JCOBEM. ISSN 1066-5277 (print), 1557-8666 (electronic). URL <https://www.liebertpub.com/doi/abs/10.1089/cmb.2016.0213>; <https://www.liebertpub.com/doi/pdf/10.1089/cmb.2016.0213>.
- Braun:2013:DAN**
Moritz Braun. **Different approaches to the numerical solution of the 3D Poisson equation implemented in Python.** *Computing*, 95(1s):49–60, May 2013. CODEN CMPTA2. ISSN 0010-485X (print), 1436-5057 (electronic). URL <http://link.springer.com/article/10.1007/s00607-013-0300-x>.
- Brinkmann:2002:GGG**
Peter Brinkmann. **Gumbie: a GUI generator for Jython.** *Dr. Dobb's Journal of Software Tools*, 27(4):46–50, April 2002. CODEN DDJOEB. ISSN 1044-789X. URL http://www.ddj.com/ftp/2002/2002_04/gumbie.txt; http://www.ddj.com/ftp/2002/2002_04/gumbie.zip.
- Briggs:2006:IER**
Keith Briggs. **Implement-**

- ing exact real arithmetic in python, C++ and C. *Theoretical Computer Science*, 351 (1):74–81, February 14, 2006. CODEN TCSCDI. ISSN 0304-3975 (print), 1879-2294 (electronic).
- [Bri12a] Emmanuel Briot. Gem #105: Lady Ada kisses Python — part 1. *ACM SIGADA Ada Letters*, 32(2):45–46, August 2012. CODEN AALEE5. ISSN 1094-3641 (print), 1557-9476 (electronic).
- [Bri12b] Emmanuel Briot. Gem #106: Lady Ada kisses Python — part 2. *ACM SIGADA Ada Letters*, 32(2):47–49, August 2012. CODEN AALEE5. ISSN 1094-3641 (print), 1557-9476 (electronic).
- [BRM10] Colin Blundell, Arun Raghavan, and Milo M. K. Martin. RETCON: transactional repair without replay. *ACM SIGARCH Computer Architecture News*, 38(3):258–269, June 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).
- [Bro00] Martin C. Brown. *Python annotated archives*. Osborne/McGraw-Hill, Berkeley, CA, USA, 2000. ISBN 0-07-212104-1. xxii + 722 pp. LCCN QA76.73.P98 B76 2000. Includes CD-ROM.
- [Bro06] James Burton Browning. *Design, logic, and programming with Python: a hands-on approach*. iUniverse, New York, NY, USA, 2006. ISBN 0-595-40810-9. xii + 214 pp. LCCN ????
- [Bru09] Corey Brune. Python: an untapped resource in system administration. *login: the USENIX Association newsletter*, 34(1):??, February 2009. CODEN LOGNEM. ISSN 1044-6397. URL <https://www.usenix.org/publications/login/february-2009-volume-34-number-1/python-untapped-resource-system-administration>.
- [BS19] Ivo Balbaert and Adrian Salceanu. *Julia 1.0 programming complete reference guide: discover Julia, a high-performance language for technical computing*. Learning path. Packt Publishing, Birmingham, UK, 2019. ISBN 1-83882-467-7. viii + 451 pp. LCCN QA76.73.J84. URL <http://proquest.safaribooksonline.com/?fpi=9781838822248>.
- [BS21] Austen Bernardi and Jessica M. J. Swanson. *CycFlowDec*.

a Python module for decomposing flow networks using simple cycles. *SoftwareX*, 14 (??):??, June 2021. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021000212>.

Bauer:2016:PEM

[BSG⁺16]

Martin Bauer, Florian Schornbaum, Christian Godenschwager, Matthias Markl, Daniela Anderl, Harald Köstler, and Ulrich Rüde. A Python extension for the massively parallel multiphysics simulation framework waLBerla. *International Journal of Parallel, Emergent and Distributed Systems: IJPEDS*, 31(6):529–542, 2016. CODEN ????? ISSN 1744-5760 (print), 1744-5779 (electronic).

Balbaert:2016:JHP

[BSS16]

Ivo Balbaert, Avik Sengupta, and Malcolm Sherrington. *Julia: high performance programming: learning path: leverage the power of Julia to design and develop high performing programs*. Learning path. Packt Publishing, Birmingham, UK, 2016. ISBN 1-78712-570-X, 1-78712-610-2 (e-book). 697 pp. LCCN QA76.7 .B353 2016.

Borojeny:2020:PPA

[BSSz⁺20]

Ali Ebrahimpour Borojeny, Akash Shrestha, Ali Sharifzarchi, Suzanne Renick Gallagher, Süleyman Cenk Sahi-

nalp, and Hamidreza Chitsaz. PyGTED: Python application for computing graph traversal edit distance. *Journal of Computational Biology*, 27(3):436–439, March 2020. CODEN JCOBEM. ISSN 1066-5277 (print), 1557-8666 (electronic). URL <https://www.liebertpub.com/doi/abs/10.1089/cmb.2019.0510>; <https://www.liebertpub.com/doi/pdf/10.1089/cmb.2019.0510>.

Binder:2017:QMP

[BST⁺17]

Jan M. Binder, Alexander Stark, Nikolas Tomek, Jochen Scheuer, Florian Frank, Kay D. Jahnke, Christoph Müller, Simon Schmitt, Mathias H. Metsch, Thomas Unden, Tobias Gehring, Alexander Huck, Ulrik L. Andersen, and Lachlan J. Rogers Fedor Jelezko. Qudi: a modular Python suite for experiment control and data processing. *SoftwareX*, 6(??):81–84, ????? 2017. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711017300055>.

Bruaset:2006:NSP

[BT06]

Are Magnus Bruaset and Aslak Tveito, editors. *Numerical Solution of Partial Differential Equations on Parallel Computers*, volume 51 of *Lecture Notes in Computational Science and Engineering*. Springer-Verlag, Berlin, Germany / Heidelberg,

- Germany / London, UK / etc., 2006. CODEN LNCSA6. ISBN 3-540-29076-1 (print), 3-540-31619-1 (e-book). ISSN 1439-7358. xii + 482 pp. LCCN QA377 .N87 2006. URL <http://link.springer.com/book/10.1007/3-540-31619-1>. [Buc15]
- Boelens:2021:QMF**
- [BT21] Arnout M. P. Boelens and Hamdi A. Tchelepi. **QuantImpy**: Minkowski functionals and functions with Python. *SoftwareX*, 16(??):??, December 2021. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021001151>. [BUS21]
- Belson:2014:AMP**
- [BTR14] Brandt A. Belson, Jonathan H. Tu, and Clarence W. Rowley. Algorithm 945: **modred** — a parallelized model reduction library. *ACM Transactions on Mathematical Software*, 40(4):30:1–30:23, June 2014. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).
- Bucquet:2014:AIP**
- [Buc14] Samuel Bucquet. Accessing the IO ports of the Beaglebone Black with Python. *Linux journal*, 2014(246):3:1–3:??, October 2014. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).
- Buchanan:2015:PWP**
- Cameron Buchanan. *Python web penetration testing cookbook: over 60 indispensable Python recipes to ensure you always have the right code on hand for web application testing*. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78439-990-6, 1-78439-293-6. 224 (est.) pp. LCCN QA76.73.P98. URL <http://proquest.safaribooksonline.com/?fpi=9781784392932>.
- Bartlett:2021:HPP**
- John Bartlett, Chris Uchytíl, and Duane Storti. High-productivity parallelism with Python plus packages (but without a cluster). *Computing in Science and Engineering*, 23(4):38–46, July/August 2021. CODEN CSENF A. ISSN 1521-9615 (print), 1558-366X (electronic).
- Bienstman:2007:PNR**
- [BVB⁺07] Peter Bienstman, Lieven Vanholme, Wim Bogaerts, Pieter Dumon, and Peter Vandersteegen. Python in nanophotonics research. *Computing in Science and Engineering*, 9(3):46–47, May/June 2007. CODEN CSENF A. ISSN 1521-9615 (print), 1558-366X (electronic).
- Bay:2022:PSV**
- [BVV22] Mélanie M. Bay, Silvia Vignolini, and Kevin Vynck. PyL-

lama: a stable and versatile Python toolkit for the electromagnetic modelling of multilayered anisotropic media. *Computer Physics Communications*, 273(??):Article 108256, April 2022. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465521003684>.

Bradbury:2014:LPR

[BW14]

Alex Bradbury and R. (Russel) Winder. *Learning Python with Raspberry Pi*. Wiley, New York, NY, USA, 2014. ISBN 1-118-71705-8 (paperback), 1-118-71702-3 (e-book), 1-118-71703-1 (e-book), 1-306-47299-7 (e-book). xvi + 270 pp. LCCN QA76.76.D47 .B73 2014.

Bodker:2022:SPB

[BWMS22]

Mikkel S. Bødker, Collin J. Wilkinson, John C. Mauro, and Morten M. Smedskjaer. StatMechGlass: Python based software for composition-structure prediction in oxide glasses using statistical mechanics. *SoftwareX*, 17(??):??, January 2022. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021001606>.

Brandstetter:2021:KPP

[BYL⁺21]

Dominik Brandstetter, Xiaosheng Yang, Daniel Lüftner,

F. Stefan Tautz, and Peter Puschnig. kMap.py: a Python program for simulation and data analysis in photoemission tomography. *Computer Physics Communications*, 263(??):Article 107905, June 2021. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465521000461>.

Cannon:2014:PPB

[Can14]

Jason Cannon. *Python programming for beginners: an introduction to the Python computer language and computer programming*. ????, ????, 2014. ISBN 1-5010-0086-1. 152 pp. LCCN QA76.73.P98 C366 2014.

Cass:2017:WTH

Stephen Cass. Wearable tech for Halloween — the Gemma MO's embedded Python lets you change your code on the fly [resources tools]. *IEEE Spectrum*, 54(10):15–16, October 2017. CODEN IIESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).

Cass:2020:TPL

[Cas20]

S. Cass. The top programming languages: Our latest rankings put Python on top-again — [careers]. *IEEE Spectrum*, 57(8):22, August 2020. CODEN IIESAM. ISSN 0018-9235 (print), 1939-9340 (electronic).

- [CB96] **Crespo:1996:WBB**
 Arturo Crespo and Eric A. Bier. WebWriter: a browser-based editor for constructing Web applications. *Computer Networks and ISDN Systems*, 28(7-11):1291-1306, May 1, 1996. CODEN CNISE9. ISSN 0169-7552 (print), 1879-2324 (electronic). URL http://www.elsevier.com/cgi-bin/cas/tree/store/comnet/cas_sub/browse/browse.cgi?year=1996&volume=28&issue=7-11&aid=1616.
- [CBB14] **Cooper:2014:BES**
 Christopher D. Cooper, Jaydeep P. Bardhan, and L. A. Barba. A biomolecular electrostatics solver using Python, GPUs and boundary elements that can handle solvent-filled cavities and Stern layers. *Computer Physics Communications*, 185(3):720-729, March 2014. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465513003731>.
- [CBLI22] **Ching:2022:QLO**
 Eric J. Ching, Brett Bornhoft, Ali Lasemi, and Matthias Ihme. Quail: a lightweight open-source discontinuous Galerkin code in Python for teaching and prototyping. *SoftwareX*, 17(??):??, January 2022. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S235271102200005X>.
- [CBW+21] **Chard:2021:EAP**
 Kyle Chard, Yadu Babuji, Anna Woodard, Ben Clifford, Zhuozhao Li, Mihael Hategan, Ian Foster, Mike Wilde, and Daniel S. Katz. Extended abstract: Productive parallel programming with Parsl. *ACM SIGADA Ada Letters*, 40(2):73-75, April 2021. CODEN AALEE5. ISSN 1094-3641 (print), 1557-9476 (electronic). URL <https://dl.acm.org/doi/10.1145/3463478.3463486>.
- [CC20] **Cooper:2020:SDS**
 Crispin H. V. Cooper and Alain J. F. Chiaradia. sDNA: 3-d spatial network analysis for GIS, CAD, command line and Python. *SoftwareX*, 12(??):Article 100525, July/December 2020. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711019303401>.
- [CCFB16] **Cooper:2016:PPP**
 Christopher D. Cooper, Natalia C. Clementi, Gilbert Forsyth, and Lorena A. Barba. PyGBe: Python, GPUs and boundary elements for biomolecular electrostatics. *Journal of Open Source Software*, 1(4):43:1, August 2016. CODEN ????? ISSN 2475-9066. URL <http://www.sciencedirect.com/science/article/pii/S24759066>.

joss.theoj.org/papers/10.21105/joss.00043.

Castanos:2012:BPE

- [CEI⁺12] Jose Castanos, David Edelsohn, Kazuaki Ishizaki, Priya Nagpurkar, Toshio Nakatani, Takeshi Ogasawara, and Peng Wu. On the benefits and pitfalls of extending a statically typed language JIT compiler for dynamic scripting languages. *ACM SIGPLAN Notices*, 47(10):195–212, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Cid-Fuentes:2020:EDH

- [CFÁA⁺20] Javier Álvarez Cid-Fuentes, Pol Álvarez, Ramon Amela, Kuninori Ishii, Rafael K. Morizawa, and Rosa M. Badia. Efficient development of high performance data analytics in Python. *Future Generation Computer Systems*, 111(?):570–581, October 2020. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167739X18321393>.

Clementi:2017:PPL

- [CFCB17] Natalia C. Clementi, Gilbert Forsyth, Christopher D. Cooper, and Lorena A. Barba. PyGBe-LSP. *Python and GPU boundary-integral solver for electrostatics*. *Journal of Open Source Software*, 2(19):306:1–306:2,

November 2017. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00306>.

Cartis:2019:IFR

- [CFMR19] Coralia Cartis, Jan Fiala, Benjamin Marteau, and Lindon Roberts. Improving the flexibility and robustness of model-based derivative-free optimization solvers. *ACM Transactions on Mathematical Software*, 45(3):32:1–32:41, August 2019. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL <https://dl.acm.org/citation.cfm?id=3338517>.

Chang:2014:CPP

- [CFSK14] Yuan-Pin Chang, Frank Filsinger, Boris G. Sartakov, and Jochen Küpper. CMIstark: Python package for the stark-effect calculation and symmetry classification of linear, symmetric and asymmetric top wavefunctions in dc electric fields. *Computer Physics Communications*, 185(1):339–349, January 2014. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465513003019>.

Chilenski:2017:EME

M. A. Chilenski, I. C. Faust, and J. R. Walk. eq-tools: Modular, extensible, open-source, cross-machine Python tools for working with

- magnetic equilibria. *Computer Physics Communications*, 210(??):155–162, January 2017. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S001046551630282X>. [CH17]
- [CG17] Daniel J. Ching and Dogă Gürsoy. XDesign: an open-source software package for designing X-ray imaging phantoms and experiments. *Journal of Synchrotron Radiation*, 24(2):537–544, 2017. ISSN 0909-0495 (print), 1600-5775 (electronic).
- [CGHGRB21] Luis Cabañero-Gomez, Ramon Hervas, Ivan Gonzalez, and Luis Rodriguez-Benitez. `eeglib`: a Python module for EEG feature extraction. *SoftwareX*, 15(??):??, July 2021. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021000753>.
- [CGK11] Bryan Catanzaro, Michael Garland, and Kurt Keutzer. Copperhead: compiling an embedded data parallel language. *ACM SIGPLAN Notices*, 46(8):47–56, August 2011. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). [CHG⁺16]
- PPoPP ’11 Conference proceedings.
- Cokelaer:2017:PSSb**
- Thomas Cokelaer and Juer-gen Hasch. ‘Spectrum’: Spectral analysis in Python. *Journal of Open Source Software*, 2(18):348:1–348:2, October 2017. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00348>.
- Chapman:2001:CUI**
- Mitch Chapman. Create user interfaces with Glade. *Linux journal*, 87:88, 90–92, 94, July 2001. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic). URL <http://noframes.linuxjournal.com/lj-issues/issue87/4702.html>. See erratum [Ano01a].
- Chan:2015:LPO**
- Jamie Chan. *Learn Python in one day and learn it well: Python for beginners with hands-on project: the only book you need to start coding in Python immediately*. CreateSpace Independent Publishing, North Charleston, SC, USA, 2015. ISBN 1-5060-9438-4 (paperback). 123 pp. LCCN QA76.73.P98 C453 2015.
- Constantine:2016:PPA**
- Paul Constantine, Ryan Howard, Andrew Glaws, Zachary Grey, Paul Diaz, and Leslie Fletcher. Python active-subspaces utility

library. *Journal of Open Source Software*, 1(5):79:1, September 2016. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00079>.

Christopher:2002:PPP

- [Chr02] Thomas W. Christopher. *Python programming patterns*. P T R Prentice-Hall, Englewood Cliffs, NJ 07632, USA, 2002. ISBN 0-13-040956-1. xix + 538 pp. LCCN QA76.73.P98 C47 2002. URL http://www.phptr.com/ptrbooks/ptr_0130409561.html. [Chu07a]

Chun:2001:CPP

- [Chu01] Wesley Chun. *Core Python programming*. Prentice Hall PTR core series. P T R Prentice-Hall, Englewood Cliffs, NJ 07632, USA, 2001. ISBN 0-13-026036-3. xxix + 771 pp. LCCN QA76.73.P98 C48 2001. URL http://www.phptr.com/ptrbooks/ptr_0130260363.html. [Chu07b]

Chun:2002:KPR

- [Chu02a] Wesley J. Chun. Keeping up with Python: the 2.2 release. *Linux journal*, 99:??, July 2002. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic). URL <http://www.linuxjournal.com/article/5597>.

Chun:2002:PQG

- [Chu02b] Wesley J. Chun. Python 2.2 Q&A with Guido van Rossum,

creator of Python. *Linux journal*, 98:??, June 2002. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic). URL <http://www.linuxjournal.com/article.php?sid=5948>.

Chun:2007:ACPb

Wesley J. Chun. *Au coeur de Python: Notions avancées. (French) [Core Python: Advanced ideas]*. CampusPress, Paris, France, 2007. ISBN 2-7440-2195-4. xxii + 337 pp. LCCN ????

Chun:2007:ACPa

Wesley J. Chun. *Au coeur de Python: Notions fondamentales. (French) [Core Python: Fundamental ideas]*. CampusPress, Paris, France, 2007. ISBN 2-7440-2148-2. xxviii + 645 pp. LCCN ????

Chun:2007:CPP

Wesley J. Chun. *Core Python programming*. Prentice Hall core series. Prentice-Hall, Englewood Cliffs, NJ 07632, USA, second edition, 2007. ISBN 0-13-226993-7 (paperback). xxxvii + 1077 pp. LCCN QA76.73.P98 C48 2007. URL <http://www.loc.gov/catdir/toc/ecip0615/2006019559.html>.

Chun:2008:PF

Wesley Chun. *Python fundamentals*. Prentice-Hall, Englewood Cliffs, NJ 07632, USA,

2008. ISBN 0-13-714341-9 (paperback). vi + 94 pp. LCCN ????
- [CI96] **Cabrera:1996:PFI** [CL06] L.-F. Cabrera and N. Islam, editors. *Proceedings of the Fifth International Workshop on Object-Orientation in Operating Systems: October 27–28, 1996, Seattle, Washington*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1996. ISBN 0-8186-7693-0. LCCN QA 76.76 O63 I59 1996. IEEE catalog number 96TB100089.
- [CK00] **Chapman:2000:EPT** [Cla15] Mitch Chapman and Brian Kelley. Examining the PyGtk toolkit. *Dr. Dobb's Journal of Software Tools*, 25(4):82, 84, 86, 88, April 2000. CODEN DDJOEB. ISSN 1044-789X. URL http://www.ddj.com/ftp/2000/2000_04/pygtk.txt.
- [CKK⁺13] **Chun:2013:GPP** Kyungwon Chun, Huioon Kim, Hyounggyu Kim, Kil Su Jung, and Youngjoo Chung. GMES: a Python package for solving Maxwell's equations using the FDTD method. *Computer Physics Communications*, 184(4):1272–1279, April 2013. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465512004079>.
- Cai:2006:PPS** Xing Cai and Hans Petter Langtangen. Parallelizing PDE solvers using the Python programming language. In Bruaset and Tveito [BT06], pages 295–325. CODEN LNCSA6. ISBN 3-540-29076-1 (print), 3-540-31619-1 (e-book). ISSN 1439-7358. LCCN QA377 .N87 2006. URL http://link.springer.com/content/pdf/10.1007/3-540-31619-1_9.
- Clare:2015:RFS** Amanda Clare. Review of “*A functional start to computing with Python*”, Ted Herman, CRC Press, 2014, ISBN 978-1-4665-0455-4. *Journal of Functional Programming*, 25:e15, ??? 2015. CODEN JFPRES. ISSN 0956-7968 (print), 1469-7653 (electronic). URL <https://www.cambridge.org/core/journals/journal-of-functional-programming/article/review-of-a-functional-start-to-computing-with-python-ted-herman-crc-press-2014-isbn-9781466504554/CDD2895726478A185EDA78AE98C30BB>
- [CLM05] **Cai:2005:PPP** Xing Cai, Hans Petter Langtangen, and Halvard Moe. On the performance of the Python programming language for serial and parallel scientific computations. *Scientific Programming*, 13(1):31–56, ??? 2005.

- CODEN SCIPEV. ISSN 1058-9244 (print), 1875-919X (electronic). [CM20]
- [CLMM20] Chase Coleman, Spencer Lyon, Lilia Maliar, and Serguei Maliar. Matlab, Python, Julia: What to choose in economics? *Computational Economics*, page ??, 2020. CODEN CNOMEL. URL <http://link.springer.com/article/10.1007/s10614-020-09983-3>. [CMM14]
- [CLT20] Marius Cornea, Weiqiang Liu, and Arnaud Tisserand, editors. *2020 27th IEEE Symposium on Computer Arithmetic: ARITH 2020: proceedings: Portland, Oregon, USA, 7–10 June 2020*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020. ISBN 1-72817-120-2, 1-72817-121-0. LCCN ????. URL <https://ieeexplore.ieee.org/servlet/opac?punumber=9146973>. [Coe17]
- [CM07] Jonathan Cooper and Steve McKeever. Experience report: a Haskell interpreter for cellML. *ACM SIGPLAN Notices*, 42(9):247–250, September 2007. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). [Con95]
- Chaparro:2020:PPB**
Gustavo Chaparro and Andrés Mejía. Phasepy: a Python based framework for fluid phase equilibria and interfacial properties computation. *Journal of Computational Chemistry*, 41(29):2504–2526, November 2020. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).
- Ceriotti:2014:PPI**
Michele Ceriotti, Joshua More, and David E. Manolopoulos. i-PI: a Python interface for ab initio path integral molecular dynamics simulations. *Computer Physics Communications*, 185(3):1019–1026, March 2014. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S001046551300372X>.
- Coelho:2017:PJS**
Luis Pedro Coelho. Jug: Software for parallel reproducible computation in Python. *Journal of Open Research Software*, 5(1):30–??, October 27, 2017. CODEN ????. ISSN 2049-9647. URL <https://openresearchsoftware.metajnl.com/articles/10.5334/jors.161/>.
- Conway:1995:PGD**
Matthew J. Conway. Python: a GUI development tool. *In-*

- teractions (New York, N.Y.), 2* (2):23–28, April 1995. CODEN IERAE3. ISSN 1072-5520. [CR12]
- [Cop08] Rick Copeland. *Essential SQLAlchemy*. O’Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol, CA 95472, USA, 2008. ISBN 0-596-51614-2. xi + 215 pp. LCCN QA76.9.W43 C67 2008.
- [Cot03] Teresa L. Cottom. Using SWIG to bind C++ to Python. *Computing in Science and Engineering*, 5(2): 88–96, c3, March/April 2003. CODEN CSENF3. ISSN 1521-9615 (print), 1558-366X (electronic). URL <http://csdl.computer.org/comp/mags/cs/2003/02/c2088abs.htm>; <http://csdl.computer.org/dl/mags/cs/2003/02/c2088.htm>; <http://csdl.computer.org/dl/mags/cs/2003/02/c2088.pdf>. [CR15]
- [Cox14] Tim Cox. *Raspberry Pi cookbook for Python programmers: over 50 easy-to-comprehend tailor-made recipes to get the most out of the Raspberry Pi and unleash its huge potential using Python*. Packt Publishing, Birmingham, UK, 2014. ISBN 1-84969-662-4. iii + 388 pp. LCCN QA76.8.R19 .C6. [CS09]
- [Conti:2012:TMP] Juan José Conti and Alejandro Russo. A Taint mode for Python via a library. *Lecture Notes in Computer Science*, 7127:210–222, 2012. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic). URL http://link.springer.com/chapter/10.1007/978-3-642-27937-9_15/.
- [Coelho:2015:BML] Luis Pedro Coelho and Willi Richert. *Building machine learning systems with Python: get more from your data through creating practical machine learning systems with Python*. Community experience distilled. Packt Publishing, Birmingham, UK, second edition, 2015. ISBN 1-78439-277-4, 1-78439-288-X (e-book). xi + 301 pp. LCCN QA76.73.P98 C64 2015.
- [Criado:2018:MPL] Juan C. Criado. MatchingTools: a Python library for symbolic effective field theory calculations. *Computer Physics Communications*, 227(??):42–50, June 2018. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465518300456>.
- [Choirat:2009:EP] Christine Choirat and Raf-

fello Seri. Econometrics with Python. *Journal of Applied Econometrics*, 24(4):698–704, June–July 2009. CODEN JAE-CET. ISSN 0883-7252 (print), 1099-1255 (electronic).

Capocchi:2021:WBS

[CS21]

Laurent Capocchi and Jean-Francois Santucci. A web-based simulation of discrete-event system of system with the mobile application DEVSimPy-mob. *SoftwareX*, 13(??): Article 100625, January 2021. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020303381>.

Chudoba:2013:UPS

[CSRV13]

R. Chudoba, V. Sadílek, R. Ryppl, and M. Vorechovský. Using Python for scientific computing: Efficient and flexible evaluation of the statistical characteristics of functions with multivariate random inputs. *Computer Physics Communications*, 184(2):414–427, February 2013. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465512003086>.

Cudai:2019:LSC

[CSZ⁺19]

Claudia Cudai, Emanuele Salerno, Monica Zoppè, Ivan Merelli, and Anna Tonazzini. ChromStruct 4: a Python

code to estimate the chromatin structure from Hi-C data. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, 16(6):1867–1878, November 2019. CODEN ITCBCY. ISSN 1545-5963 (print), 1557-9964 (electronic). URL <https://dl.acm.org/doi/abs/10.1109/TCBB.2018.2838669>.

Cuesta:2013:PDA

Hector Cuesta. *Practical data analysis*. Packt Publishing, Birmingham, UK, 2013. ISBN 1-78328-099-9 (print), 1-68015-361-7 (e-book), 1-78328-100-6. 360 pp. LCCN QA76.9.S88 D683 2013eb. URL <http://proquest.safaribooksonline.com/9781783280995>.

Chandra:2015:PRE

[CV15]

Rakesh Vidya Chandra and Bala Subrahmanyam Varanasi. *Python requests essentials: learn how to integrate your applications seamlessly with web services using Python requests*. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78439-541-2, 1-78439-231-6 (e-book). 134 pp. LCCN QA76.73.P98. URL <http://proquest.safaribooksonline.com/9781784395414>.

Couty:2021:GGA

[CWLG⁺21]

Victor Couty, Jean-François Witz, Pauline Lecomte-Grosbras, Julien Berthe, Eric Delecombe, and Mathias Brieu.

- GPUCorrel: a GPU accelerated Digital Image Correlation software written in Python. *SoftwareX*, 16(??):??, December 2021. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021001102>. [Dah18c]
- [CWM⁺21] Victor Couty, Jean-François Witz, Corentin Martel, François Bari, and Antoine Weisrock. CRAPPY: Command and Real-Time Acquisition in Parallelized Python, a Python module for experimental setups. *SoftwareX*, 16(??):??, December 2021. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021001278>. [DAJ⁺15]
- [Dah18a] Björn Dahlgren. ChemPy: a package useful for chemistry written in Python. *Journal of Open Source Software*, 3(24):565:1–565:2, April 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00565>. [Dal01]
- [Dah18b] Björn Dahlgren. pyneqsys: Solve symbolically defined systems of non-linear equations numerically. *Journal of Open Source Software*, 3(21):531:1–531:2, January 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00531>. [Dahlgren:2018:PPSa]
- Björn Dahlgren. pyodesys: Straightforward numerical integration of ODE systems from Python. *Journal of Open Source Software*, 3(21):490:1–490:2, January 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00490>. [Desai:2015:PPA]
- Pratik Desai, Saleem Ahmed, James Jones, Jasmine Nadar, and Vikrant Phadke, editors. *Python programming for Arduino: develop practical Internet of Things prototypes and applications with Arduino and Python*. Community Experience Distilled. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78328-593-1 (paperback), 1-78328-594-X (e-book). 400 (est) pp. LCCN QA76.73.P98. [Dalke:2001:MCE]
- Andrew Dalke. Making C extensions more Pythonic. *Dr. Dobbs's Journal of Software Tools*, 26(1):68, 70, 72, 74, 76, January 2001. CODEN DDJOEB. ISSN 1044-789X. URL http://www.ddj.com/ftp/2001/2001_01/cpython.txt; http://www.ddj.com/ftp/2001/2001_01/cpython.zip.

Daly:2007:NGW

- [Dal07] Liza Daly. *Next-generation web frameworks in Python*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2007. ISBN 0-596-51371-2. LCCN QA76.73.P98 L59 2007eb; QA76.73.P98. URL <http://www.oreilly.com/catalog/9780596513719>.

Dan:2018:LJE

- [Dan18a] Toomey Dan. *Learning Jupyter 5: explore interactive computing using Python, Java, JavaScript, R, Julia, and JupyterLab*. Packt Publishing, Birmingham, UK, 2018. ISBN 1-78913-740-3, 1-78913-744-6. 282 pp. LCCN Q183.9; QA76.9.I52 .T666 2018.

Daniel:2018:SG

- [Dan18b] John Leon Daniel. *Security with Go*. Packt Publishing, Birmingham, UK, 2018. ISBN 1-78862-791-1. LCCN QA76.585 .L466 2018; QA76.59.

Darcy:2012:EGP

- [Dar12] Jeff Darcy. Extending GlusterFS with Python. *Linux journal*, 2012(223):2:1-2:??, November 2012. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).

Davies:2021:SPB

- [Dav21] Claire L. Davies. SEDBYS: a Python-based SED Builder for Young Stars. *SoftwareX*, 14 (??):??, June 2021. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021000327>.

Dawson:2003:PPA

- [Daw03] Michael Dawson. *Python programming for the absolute beginner*. Premier Press Inc., Boston, MA, USA, 2003. ISBN 1-59200-073-8 (paperback), 1-59200-073-8, 1-59200-269-2 (e-book). xviii + 452 pp. LCCN QA76.73.P98 D387 2003. URL <http://proquest.safaribooksonline.com/1592000738>.

Dawson:2006:PPA

- [Daw06] Mike Dawson. *Python programming for the absolute beginner*. Thomson Course Technology, Boston, MA, USA, second edition, 2006. ISBN 1-59863-112-8. xxiv + 447 pp. LCCN QA76.73.P98 D39 2006.

Dawson:2010:PPA

- [Daw10] Mike Dawson. *Python programming for the absolute beginner*. For the absolute beginner. Course Technology Cengage Learning, Boston, MA, USA, third edition, 2010. ISBN 1-4354-5500-2. xxiii + 455 pp. LCCN QA76.73.P98 D39 2010. URL <http://catdir.loc.gov/catdir/enhancements/fy1105/2009933304-b.html>;

- <http://catdir.loc.gov/catdir/enhancements/fy1105/2009933304-d.html>; <http://catdir.loc.gov/catdir/enhancements/fy1105/2009933304-t.html>; <http://www.courseptr.com/downloads>.
- [Day07a] Brad Dayley. *Python in tasca: codice e commandi in tasca*. Pearson Education, Milano, Italy, 2007. ISBN 88-7192-405-3. vi + 277 pp. LCCN ????
- [Day07b] Brad Dayley. *Python phrasebook: essential code and commands*. Developer's library. SAMS Publishing, Indianapolis, IN, USA, 2007. ISBN 0-672-32910-7 (paperback). v + 275 pp. LCCN QA76.73.P98 D395 2007. URL <http://www.loc.gov/catdir/toc/fy0706/2006922308.html>.
- [Day14] Charles Day. Python power. *Computing in Science and Engineering*, 16(1):88, January/February 2014. CODEN CSENF A. ISSN 1521-9615.
- [DB17] Alexandra K. Diem and Neil W. Bressloff. VaMpy: a Python package to solve 1D blood flow problems. *Journal of Open Research Software*, 5(1):17-??, June 08, 2017. CODEN ????. ISSN 2049-9647. URL <https://openresearchsoftware.metajnl.com/articles/10.5334/jors.159/>.
- [DBdFdSR21] José Diogo L. Dutra, Thiago D. Bispo, Sabrina M. de Freitas, and Marcos V. dos S. Rezende. ParamGULP: an efficient Python code for obtaining interatomic potential parameters for General Utility Lattice Program. *Computer Physics Communications*, 265(??):Article 107996, August 2021. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465521001089>.
- [DCOC+19] Eugenia Dzib, José Luis Cabellos, Filiberto Ortíz-Chi, Sudip Pan, Annia Galano, and Gabriel Merino. Eyringpy: a program for computing rate constants in the gas phase and in solution. *International Journal of Quantum Chemistry*, 119(2):e25686:1-e25686:??, January 15, 2019. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic).
- [DD15] I. Dogaru and R. Dogaru. Using Python and Julia for efficient implementation of natural computing and complexity related algorithms. In *2015 20th International Conference*

- on Control Systems and Computer Science*, pages 599–604. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.
- [DDK19] Joseph Vinish D’silva, Florestan De Moor, and Bettina Kemme. Making an RDBMS data scientist friendly: advanced in-database interactive analytics with visualization support. *Proceedings of the VLDB Endowment*, 12(12): 1930–1933, August 2019. CODEN ????? ISSN 2150-8097.
- [DDLW02] Harvey M. Deitel, Paul Deitel, Jonathan Liperi, and Ben Wiederemann. *Python How To Program*. P T R Prentice-Hall, Englewood Cliffs, NJ 07632, USA, 2002. ISBN 0-13-092361-3 (paperback), 0-13-092557-8 (CD-ROM). lviii + 1292 + 6 pp. LCCN QA76.73.P98 P98 2002. US\$74.00. URL http://www.phptr.com/ptrbooks/ptr_0130923613.html.
- [DDMS14] Vladimiras Dolgopolas, Valentina Dagiene, Saulius Minkevicius, and Leonidas Sakalauskas. Python for scientific computing education: Modeling of queueing systems. *Scientific Programming*, 22(1): 37–51, ????? 2014. CODEN SCIPEV. ISSN 1058-9244 (print), 1875-919X (electronic).
- [DDT20] **Dsilva:2019:MRD** Stefano Dalla Palma, Dario Di Nucci, and Damian A. Tamburri. **Palma:2020:APL** *AnsibleMetrics*: a Python library for measuring Infrastructure-as-Code blueprints in Ansible. *SoftwareX*, 12(??):Article 100633, July/December 2020. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020303460>.
- [Dec04] **Deitel:2002:PHP** Jan Decaluwe. MyHDL: a Python-based hardware description language. *Linux journal*, 2004(127):??, November 2004. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).
- [Dej22] **Dejanovic:2022:PLG** Igor Dejanović. **DePalma:2019:PPI** *Parglare*: a LR/GLR parser for Python. *Science of Computer Programming*, 214(??):??, February 1, 2022. CODEN SCPGD4. ISSN 0167-6423 (print), 1872-7964 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167642321001271>.
- [DEMM19] **DePalma:2019:PPI** Barbara De Palma, Marco Erba, Luca Mantovani, and Nicola Mosco. A Python program for the implementation

- of the Γ -method for Monte Carlo simulations. *Computer Physics Communications*, 234(??):294–301, January 2019. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465518302534>. [DFC18]
- Dutt:2000:GBG**
- [DF00] Christoph Dutt and Joachim Freiburg. *GiMP: Bilder gestalten, Fotos retuschieren; [Grundlagen der professionellen Bildbearbeitung, der Umgang mit Fotos, Grafiken und Text, Bilder für das Internet richtig vorbereiten; auf der CD: GIMP für Windows, SCO Unix, Debian GNU Linux, Solaris, OS/2 und BSD, Quelltext aller GIMP- und GTK-Versionen, über 300 Plug-ins in C, Perl, tcl, Python und Scheme, XFree86/23.3.6, GIMP User Manual als PDF-Dateien]*. C und L, Böblingen, Germany, 2000. ISBN 3-932311-64-7. 522 + 98 pp. LCCN ???? Includes CD-ROM. [DFSW19]
- Doulis:2019:CMP**
- Georgios Doulis, Jörg Frauendiener, Chris Stevens, and Ben Whale. COFFEE — an MPI-parallelized Python package for the numerical evolution of differential equations. *SoftwareX*, 10(??):Article 100283, July/December 2019. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711019300950>. See [FC17].
- Drummond:2009:PPB**
- [DGMP09] L. Anthony Drummond, Vicente Galiano, Violeta Migallón, and Jose Penadés. PyACTS: a Python based interface to ACTS tools and parallel scientific applications. *International Journal of Parallel Programming*, 37(1):58–77, February 2009. CODEN IJPPE5. ISSN 0885-7458 (print), 1573-7640 (electronic). URL <http://www.springerlink.com/openurl.asp?genre=article&issn=0885->
- Dalcin:2021:MSU**
- [DF21] Lisandro Dalcin and Yao-Lung L. Fang. mpi4py: Status update after 12 years of development. *Computing in Science and Engineering*, 23(4):47–54, July/August 2021. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).
- Demidov:2018:UPP**
- Alexander G. Demidov, Michael E. Fortunato, and Coray M. Colina. Update 0.2 to “pysimm: a Python package for simulation of molecular systems”. *SoftwareX*, 7(??):63–69, January/June 2018. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711018300141>. See [FC17].

- 7458&volume=37&issue=1&page=58.
- [DHH96] P. F. Dubois, K. Hinsin, and J. Hugunin. Numerical Python. *Computers in Physics*, 10(3):262–267, May/June 1996. CODEN CPHYE2. ISSN 0894-1866 (print), 1558-4208 (electronic).
- [Di 13] Massimo Di Pierro. *Annotated algorithms in Python: with applications in physics, biology, and finance*. Experts4Solutions, Lexington, KY, USA, 2013. ISBN 0-9911604-0-1 (paperback). 388 pp. LCCN QA76.73.P98 D57 2013.
- [Di 14] Massimo Di Pierro. Portable parallel programs with Python and OpenCL. *Computing in Science and Engineering*, 16(1):34–40, January/February 2014. CODEN CSENF. ISSN 1521-9615.
- [DM20] Alexandre Decan and Tom Mens. Sismic — a Python library for statechart execution and testing. *SoftwareX*, 12(??):Article 100590, July/December 2020. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020303034>.
- [DMC⁺15] Hong Ding, Bharat Medasani, Wei Chen, Kristin A. Persson, Maciej Haranczyk, and Mark Asta. PyDII: a Python framework for computing equilibrium intrinsic point defect concentrations and extrinsic solute site preferences in intermetallic compounds. *Computer Physics Communications*, 193(??):118–123, August 2015. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465515001149>.
- [DMD⁺21] Ryan S. DeFever, Ray A. Matsumoto, Alexander W. Dowling, Peter T. Cummings, and Edward J. Maginn. MoSDeF Cassandra: a complete Python interface for the Cassandra Monte Carlo software. *Journal of Computational Chemistry*, 42(18):1321–1331, July 5, 2021. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).
- [Dog15] Fernando Doglio. *Mastering Python High Performance*. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78398-930-0, 1-78398-931-9 (e-book). 260 pp. LCCN T55.4-60.8.
- [Don09] Toby Donaldson. *Python*. Vi-

- sual quickstart guide. Peachpit Press, Inc., 1085 Keith Avenue, Berkeley, CA 94708, USA, second edition, 2009. ISBN 0-321-58544-5 (paperback). vi + 185 pp. LCCN X09.F00872.
- [Don14] **Donat:2014:LRP**
Wolfram Donat. *Learn Raspberry Pi programming with Python*. TECHNOLOGY IN ACTION series. Apress, Berkeley, CA, USA, 2014. ISBN 1-4302-6424-1 (paperback0). xxi + 231 pp. LCCN QA76.73.P98 .D663 2014.
- [Dör08] **Doring:2008:ESL**
Holger Döring. Evaluating scripting languages: How Python can help political methodologists. *The Political Methodologist*, 16(1):8–12, 2008.
- [dos01] **dosSantosLessa:2001:PDH**
André dos Santos Lessa. *Python Developer’s Handbook*. SAMS Publishing, Indianapolis, IN, USA, 2001. ISBN 0-672-31994-2. xxv + 929 pp. LCCN QA76.73.P98 L47 2001. US\$44.99.
- [DOS17] **Dawe:2017:PRI**
Edmund Noel Dawe, Piti Ongmongkolkul, and Giordon Stark. *root_numpy*: The interface between ROOT and NumPy. *Journal of Open Source Software*, 2(16):307:1–307:2, August 2017. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00307>.
- [Dougherty:1998:PGV] Dale Dougherty. Python’s Guido van Rossum. *Web Review*, ??(??):??, April 10, 1998. URL http://webreview.com/wr/pub/Dougherty_Dale.
- [Dow09] **Downey:2009:PSD**
Allen Downey. *Python for software design: how to think like a computer scientist*. Cambridge University Press, Cambridge, UK, 2009. ISBN 0-521-89811-0, 0-521-72596-8. ??? pp. LCCN QA76.73.P98 D693 2009.
- [Dow15] **Downey:2015:TPH**
Allen B. Downey. *Think Python: How to Think Like a Computer Scientist*. O’Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2015. ISBN 1-4919-3936-2. ??? pp. LCCN ????
- [DPF+21] **Demidov:2021:UPP**
Alexander G. Demidov, B. Lakshitha A. Perera, Michael E. Fortunato, Sibio Lin, and Coray M. Colina. Update 1.1 to “pysimm: a Python package for simulation of molecular systems”, (PII: S2352711016300395). *SoftwareX*, 15(??):??, July 2021.

- CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021000777>. See [FC17]. [DTM⁺18]
- Dalozze:2018:PDL**
Benoit Dalozze, Arie Tal, Stefan Marr, Hanspeter Mössenböck, and Erez Petrank. Parallelization of dynamic languages: synchronizing built-in collections. *Proceedings of the ACM on Programming Languages (PACMPL)*, 2 (OOPSLA):108:1–108:30, October 2018. URL <https://dl.acm.org/doi/abs/10.1145/3276478>.
- Dagkakis:2016:MOS**
[DPH16] Georgios Dagkakis, Ioannis Pagiannopoulos, and Cathal Heavey. ManPy: an open-source software tool for building discrete event simulation models of manufacturing systems. *Software—Practice and Experience*, 46(7):955–981, July 2016. CODEN SPEXBL. ISSN 0038-0644 (print), 1097-024X (electronic). [DTR18]
- Dalcin:2005:MP**
[DPS05] Lisandro Dalcín, Rodrigo Paz, and Mario Storti. MPI for Python. *Journal of Parallel and Distributed Computing*, 65(9):1108–1115, September 2005. CODEN JPDCER. ISSN 0743-7315 (print), 1096-0848 (electronic). [Dub05]
- Dalcin:2008:MPP**
[DPD08] Lisandro Dalcín, Rodrigo Paz, Mario Storti, and Jorge D’Elía. MPI for Python: Performance improvements and MPI-2 extensions. *Journal of Parallel and Distributed Computing*, 68(5):655–662, May 2008. CODEN JPDCER. ISSN 0743-7315 (print), 1096-0848 (electronic). [Dub07]
- Demo:2018:PPP**
Nicola Demo, Marco Tezzele, and Gianluigi Rozza. PyDMD: Python Dynamic Mode Decomposition. *Journal of Open Source Software*, 3(22):530:1–530:3, February 2018. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00530>.
- Dubois:2005:NP**
Paul F. Dubois. A nest of Pythons. *Computing in Science and Engineering*, 7(6):81–84, November/December 2005. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).
- Dubois:2007:GEI**
Paul F. Dubois. Guest Editor’s introduction: Python: Batteries included. *Computing in Science and Engineering*, 9(3):7–9, May/June 2007. CODEN CSENFA.

- ISSN 1521-9615 (print), 1558-366X (electronic). URL <http://csdl.computer.org/comp/mags/cs/2007/03/c3007.pdf>. [DY96b]
- [Duf15] Christopher Duffy. *Learning Penetration Testing with Python*. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78528-232-8, 1-78528-955-1 (e-book). 314 pp. LCCN T55.4-60.8.
- [DV21] Christoph Dürr and Jill-Jënn Vie. *Competitive programming in Python: 128 algorithms to develop your coding skills*. Cambridge University Press, Cambridge, UK, 2021. ISBN 1-108-71682-2 (paperback), 1-108-59192-2 (e-pub). LCCN QA76.73.P98. URL <https://assets.cambridge.org/9781108716826/toc/9781108716826-toc.pdf>. Translation to English from the French original by Greg Gibbons and Danièle Gibbons. [DyH21]
- [DY96a] P. F. Dubois and T.-Y. Yang. Extending Python [object-oriented language]. *Computers in Physics*, 10(4):359–365, July/August 1996. CODEN CPHYE2. ISSN 0894-1866 (print), 1558-4208 (electronic). URL <https://aip.scitation.org/doi/10.1063/1.4822457>.
- [Dubois:1996:SPE] Paul F. Dubois and T.-Y. Yang. Scientific programming: Extending Python. *Computers in Physics*, 10(4):359–??, ??? 1996. CODEN CPHYE2. ISSN 0894-1866 (print), 1558-4208 (electronic).
- [Dubois:1999:SPE] Paul F. Dubois and T.-Y. Yang. Scientific programming: Extending Python with Fortran. *Computing in Science and Engineering*, 1(5):66–73, September/October 1999. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic). URL <http://dlib.computer.org/cs/books/cs1999/pdf/c5066.pdf>; <http://www.computer.org/cse/cs1999/c5066abs.htm>.
- [DeChavez:2021:OPM] Danjo De Chavez and Junya Hasegawa. *OpenMechanochem*: a Python module for mechanochemical simulations. *SoftwareX*, 16(??):??, December 2021. CODEN ????. ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021001436>.
- [Eckel:2022:PPP] Stephen Eckel, Daniel S. Barker, Eric B. Norrgard, and Julia Scherschligt. PyLCP: a Python package for computing laser cooling physics. *Computer Physics Communica-*

tions, 270(?):Article 108166, January 2022. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465521002782>. [EPM09]

Ernesti:2008:PUH

[EK08] Johannes Ernesti and Peter Kaiser. *Python: das umfassende Handbuch; [aktuell zu Python 2.5; Einführung, Praxis, Referenz; Sprachgrundlagen, Objektorientierung, Modularisierung; Web-Programmierung mit Django, GUIs, Netzwerkkommunikation u.v.m.]*. Galileo Press, Bonn, Germany, 2008. ISBN 3-8362-1110-6. LCCN ????. [Epm99]

Ernesti:2009:PUH

[EK09] Johannes Ernesti and Peter Kaiser. *Python 3: Das umfassende Handbuch*. Galileo Computing. Galileo Press GmbH, Bonn, Germany, second edition, 2009. ISBN 3-8362-1412-1. 870 (est.) pp. LCCN ????. EUR 39.90. [ESM98]

Eschle:2020:ZSP

[ENCS20] Jonas Eschle, Albert Puig Navarro, Rafael Silva Coutinho, and Nicola Serra. *zfit: Scalable pythonic fitting*. *SoftwareX*, 11(?):Article 100508, January/June 2020. CODEN ????. ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711019303851>. [Est01]

Enbody:2009:PCP

Richard J. Enbody, William F. Punch, and Mark McCullen. Python CS1 as preparation for C++ CS2. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 41(1):116–120, March 2009. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic). Proceedings of SIGCSE '09.

Ernst:1999:TMP

T. Ernst. TRAPping Modelica with Python. *Lecture Notes in Computer Science*, 1575:288–291, 1999. CODEN LNCS9. ISSN 0302-9743 (print), 1611-3349 (electronic).

Ege:1998:PTO

R. Ege, M. Singh, and B. Meyer, editors. *Proceedings. Technology of Object-Oriented Languages and Systems, TOOLS-23*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1998. ISBN 0-8186-8383-X. LCCN ????. IEEE catalog number 97TB100221.

Esterbrook:2001:UMI

Chuck Esterbrook. Using mixins with Python. *Linux journal*, 84:114, 116, 118, 120–121, April 2001. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic). URL <http://noframes.linuxjournal>.

- com/lj-issues/issue84/4540.html.
- [Eur91] **EurOpen:1991:EUD**
 EurOpen, editor. *EurOpen. UNIX Distributed Open Systems in Perspective. Proceedings of the Spring 1991 EurOpen Conference, Tromsø, Norway, May 20–24, 1991*. EurOpen, Buntingford, Herts, UK, 1991. ISBN 1-873611-00-5. LCCN ????
- [EVC09] **Forcier:2009:PWD**
 Jeff Forcier, Paul Bissex, and Wesley Chun. *Python Web development with Django*. Developer’s library. Addison-Wesley, Reading, MA, USA, 2009. ISBN 0-13-235613-9 (paperback). 377 pp. LCCN TK5105.8885.D54 F68 2009.
- [EVV12] **Ettienne:2012:IMA**
 Mikko Berggren Ettienne, Steen Vester, and Jørgen Vil-ladsen. Implementing a multi-agent system in Python with an auction-based agreement approach. *Lecture Notes in Computer Science*, 7217: 185–196, 2012. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic). URL http://link.springer.com/chapter/10.1007/978-3-642-31915-0_11/.
- [FC17] **Fortunato:2017:PPP**
 Michael E. Fortunato and Coray M. Colina. `pysimm`: a Python package for simulation of molecular systems. *SoftwareX*, 6(??):1–6, ??? 2017. CODEN ??? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711016300395>. See update [DFC18].
- [Far02] **Farrell:2002:MP**
 Doug Farrell. Mediator/Python. *Linux journal*, 98:??, June 2002. CODEN LJJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic). URL <http://www.linuxjournal.com/article.php?sid=5858>.
- [Fee16] **Feeley:2016:CML**
 Marc Feeley. Compiling for multi-language task migration. *ACM SIGPLAN Notices*, 51(2):63–77, February 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- [Fas18] **Fasnacht:2018:PMP**
 Laurent Fasnacht. `mmappickle`: Python 3 module to store memory-mapped numpy array in pickle format. *Journal of Open Source Soft-*
- [Feh02] **Fehily:2002:VQG**
 Chris Fehily. *Visual quick-start guide: Python*. Peachpit Press, Inc., 1085 Keith Avenue, Berkeley, CA 94708,

- USA, 2002. ISBN ???? xxvi + 410 pp. LCCN A76.73.P98 F44 2002. URL <http://proquest.safaribooksonline.com/0201748843>. ■
- [FH22] **Filipovich:2022:POS** [FL06] Matthew J. Filipovich and Stephen Hughes. **PyCharge**: an open-source Python package for self-consistent electro-dynamics simulations of Lorentz oscillators and moving point charges. *Computer Physics Communications*, 274(?):Article 108291, May 2022. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465522000091>.
- [FhDAF09] **Furr:2009:PGS** [Fla08] Michael Furr, Jong hoon (David) An, and Jeffrey S. Foster. Profile-guided static typing for dynamic scripting languages. *ACM SIGPLAN Notices*, 44(10):283–300, October 2009. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- [FKA+17] **Filguiera:2017:DPF** [FLR22] Rosa Filguiera, Amrey Krause, Malcolm Atkinson, Iraklis Klampanos, and Alexander Moreno. **dispel4py**: a Python framework for data-intensive scientific computing. *The International Journal of High Performance Computing Applications*, 31(4):316–334, July 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic).
- Fettig:2006:TNP** Abe Fettig and Glyph Lefkowitz. *Twisted network programming essentials*. O’Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2006. ISBN 0-596-10032-9. xix + 213 pp. LCCN QA76.73.P98 F48 2005eb; QA76.73.P98. URL <http://www.oreilly.com/catalog/9780596100322>.
- Flaig:2008:BPP** Ruediger-Marcus Flaig. *Bioinformatics programming in Python: a practical course for beginners*. Wiley-VCH, Weinheim, Germany, 2008. ISBN 3-527-32094-6 (paperback). ix + 418 pp. LCCN ???? ■
- Fraccaroli:2022:SDT** Michele Fraccaroli, Evelina Lamma, and Fabrizio Riguzzi. Symbolic DNN-Tuner: a Python and ProbLog-based system for optimizing Deep Neural Networks hyperparameters. *SoftwareX*, 17(?):??, January 2022. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021001825>.

- [FM16] Daniel Foreman-Mackey. **corner.py**: Scatterplot matrices in Python. *Journal of Open Source Software*, 1(2):24:1–24:2, June 2016. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00024>.
- [FMPS17] Loris Fichera, Fabrizio Messina, Giuseppe Pappalardo, and Corrado Santoro. A Python framework for programming autonomous robots using a declarative approach. *Science of Computer Programming*, 139(??):36–55, June 1, 2017. CODEN SCPGD4. ISSN 0167-6423 (print), 1872-7964 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167642317300242>.
- [FPSZ21] Scott Fredericks, Kevin Parrish, Dean Sayre, and Qiang Zhu. PyXtal: a Python library for crystal structure generation and symmetry analysis. *Computer Physics Communications*, 261(??):Article 107810, April 2021. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465520304057>.
- [FRdN21] Luan Vinícius Fiorio, Chry-
- [Fichera:2017:PPF] Gianluca Frison, Tommaso Sartor, Andrea Zanelli, and Moritz Diehl. The BLAS API of BLASFEO: Optimizing performance for small matrices. *ACM Transactions on Mathematical Software*, 46(2):15:1–15:36, June 2020. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3378671>.
- [Ful96] Jim Fulton. Introduction to the Python programming language. In USENIX [USE96], page ?? ISBN 1-880446-77-4. LCCN QA76.64 .U85 1996. URL <http://www.usenix.org/publications/library/proceedings/coots96/>.
- [FV18] David P. Fleming and Jake VanderPlas. **approxposterior**: Approximate posterior distributions in Python. *Journal of Open Source Software*, 3(29):781:1–781:2, September 2018. CODEN ????? ISSN
- [Ful96] Jim Fulton. Introduction to the Python programming language. In USENIX [USE96], page ?? ISBN 1-880446-77-4. LCCN QA76.64 .U85 1996. URL <http://www.usenix.org/publications/library/proceedings/coots96/>.
- [FV18] David P. Fleming and Jake VanderPlas. **approxposterior**: Approximate posterior distributions in Python. *Journal of Open Source Software*, 3(29):781:1–781:2, September 2018. CODEN ????? ISSN

2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00781>.

Gaddis:2009:SP

- [Gad09] Tony Gaddis. *Starting out with Python*. Pearson Addison Wesley, Boston, MA, USA, 2009. ISBN 0-321-53711-4. xv + 482 pp. LCCN QA76.73.P98 G34 2009. URL <http://www.loc.gov/catdir/toc/fy0804/2008001684.html>.

Galanakis:2014:PMP

- [Gal14] Robert Galanakis. *Practical Maya programming with Python: unleash the power of Python in Maya and unlock your creativity*. Community experience distilled. Packt Publishing, Birmingham, UK, 2014. ISBN 1-84969-472-9 (paperback), 1-84969-473-7 (e-book), 1-322-00849-3 (e-book). viii + 334 pp. LCCN T385 .G34 2014. URL <http://proquest.safaribooksonline.com/?fpi=9781849694728>.

Garberson:1998:LEP

- [Gar98] John D. Garberson. Letter to the Editor: Programming Python. *login: the USENIX Association newsletter*, 23(4):??, June 1998. CODEN LOGNEM. ISSN 1044-6397.

Gardner:2009:DGP

- [Gar09] James Gardner. *The definitive guide to Pylons: [Pylons is a*

lightweight web framework emphasizing flexibility and rapid development using standard tools from the Python community; includes SQLAlchemy, JavaScript, and WSG!]. The expert's voice in web development; Books for professionals by professionals. Apress, Berkeley, CA, USA, 2009. ISBN 1-59059-934-9 (paperback). xxv + 536 pp. LCCN ???? US\$46,99.

Gutierrez:2016:IDO

- [GAS⁺16] Christopher N. Gutierrez, Mohammed H. Almeshekah, Eugene H. Spafford, Mikhail J. Atallah, and Jeff Avery. Inhibiting and detecting offline password cracking using ErsatzPasswords. *ACM Transactions on Privacy and Security (TOPS)*, 19(3):9:1–9:??, December 2016. CODEN ???? ISSN 2471-2566 (print), 2471-2574 (electronic).

Gins:2018:ACD

- [GdGB⁺18] W. Gins, R. P. de Groote, M. L. Bissell, C. Granados Buitrago, R. Ferrer, K. M. Lynch, G. Neyens, and S. Sels. Analysis of counting data: Development of the SATLAS Python package. *Computer Physics Communications*, 222(?):286–294, January 2018. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect>.

- com/science/article/pii/S0010465517302990. [GF18]
- Grady:2018:PPP**
- [GDP18] Maxwell Grady, Zhongwei Dai, and Karsten Pohl. **PLEASE: The Python Low-energy Electron Analysis Suite** — enabling rapid analysis of LEEM and LEED data. *Journal of Open Research Software*, 6(1):7–??, February 05, 2018. CODEN ????? ISSN 2049-9647. URL <https://openresearchsoftware.metajnl.com/articles/10.5334/jors.191/>. [GFB⁺14]
- Graichen:2019:SPT**
- [GEH19] Uwe Graichen, Roland Eichardt, and Jens Haueisen. **SpharaPy: a Python toolbox for spatial harmonic analysis of non-uniformly sampled data**. *SoftwareX*, 10(??):Article 100289, July/December 2019. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711019301670>. [GG21]
- Gezerlis:2020:NMPb**
- [Gez20] Alex Gezerlis. *Numerical Methods in Physics with Python*. Cambridge University Press, Cambridge, UK, 2020. ISBN 1-108-48884-6 (hardcover), 1-108-73893-1 (paperback), 1-108-77231-5 (e-pub). ????? pp. LCCN QC20.7.N86 G49 2020. [GH18]
- Goyal:2018:PGP**
- Palash Goyal and Emilio Ferrara. **GEM: a Python package for graph embedding methods**. *Journal of Open Source Software*, 3(29):876:1–876:2, September 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00876>.
- Gonina:2014:SMC**
- Ekaterina Gonina, Gerald Friedland, Eric Battenberg, Penporn Koanantakool, Michael Driscoll, Evangelos Georganas, and Kurt Keutzer. **Scalable multimedia content analysis on parallel platforms using Python**. *ACM Transactions on Multimedia Computing, Communications, and Applications*, 10(2):18:1–18:??, February 2014. CODEN ????? ISSN 1551-6857 (print), 1551-6865 (electronic).
- Gunaratne:2021:NAB**
- Chathika Gunaratne and Ivan Garibay. **NL4Py: Agent-based modeling in Python with parallelizable NetLogo workspaces**. *SoftwareX*, 16(??):??, December 2021. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021001035>.
- Gagunashvili:2018:CCG**
- Nikolay D. Gagunashvili and Helgi Halldorsson. **CHIWEI: a code of goodness of fit tests**

- for weighted and unweighted histograms in Fortran-77, C++, R and Python. *Computer Physics Communications*, 231(??):245, October 2018. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465518301449>. [GHT06]
- Gorjao:2022:MEM**
- [GHKW22] Leonardo Rydin Gorjão, Galib Hassan, Jürgen Kurths, and Dirk Witthaut. MF DFA: Efficient multifractal detrended fluctuation analysis in Python. *Computer Physics Communications*, 273(??):Article 108254, April 2022. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465521003660>. [GHT08]
- Gagunashvili:2019:CCC**
- [GHN19] Nikolay D. Gagunashvili, Helgi Halldorsson, and Helmut Neukirchen. CHICOM: Code for comparing weighted or unweighted histograms in Fortran-77, C++, R and Python. *Computer Physics Communications*, 245(??):Article 106872, December 2019. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465519302590>. [Gir21]
- Goebel:2006:BPT**
- John A. Goebel, Adil Hasan, and Francesco Safai Tehran. *The book of Python: from the tip of the tongue to the end of the tale*. No Starch Press, San Francisco, CA, USA, 2006. ISBN 1-59327-103-4 (paperback). 1000 pp. LCCN QA76.73.P98. URL <http://www.loc.gov/catdir/toc/ecip064/2005034382.html>.
- Goebel:2008:BPR**
- John A. Goebel, Adil Hasan, and Francesco Safai Tehrani. *The book of Python: a real-world reference*. No Starch Press, San Francisco, CA, USA, 2008. ISBN 1-59327-103-4. ???? pp. LCCN QA76.73.P98 G62 2008. URL <http://www.loc.gov/catdir/toc/ecip064/2005034382.html>.
- Giroux:2021:TPP**
- Bernard Giroux. `ttcrpy`: a Python package for travel-time computation and ray-tracing. *SoftwareX*, 16(??):??, December 2021. CODEN ????. ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021001217>.
- Gift:2008:PUL**
- [GJ08] Noah Gift and Jeremy M. Jones. *Python for Unix and Linux system administration*. O'Reilly & Associates,

Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2008. ISBN 0-596-51582-0. xix + 433 pp. LCCN ????

Goldwasser:2007:INP

[GL07a]

Michael H. Goldwasser and David Letscher. Introducing network programming into a CS1 course. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 39(3):19–22, September 2007. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic). Proceedings of the 12th Annual SIGCSE Conference on Innovation and Technology in Computer Science Education (ITiCSE'07).

Goldwasser:2007:TOO

[GL07b]

Michael H. Goldwasser and David Letscher. Teaching object-oriented programming in Python. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 39(3):365–366, September 2007. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic). Proceedings of the 12th Annual SIGCSE Conference on Innovation and Technology in Computer Science Education (ITiCSE'07).

Goldwasser:2008:OOP

[GL08a]

Michael H. Goldwasser and David Letscher. *Object-*

oriented programming in Python.

Pearson Prentice Hall, Upper Saddle River, NJ, USA, 2008. ISBN 0-13-615031-4. xxii + 666 pp. LCCN QA76.73.P98.G65; QA76.73.P98.G65 2008.

Goldwasser:2008:PGP

[GL08b]

Michael H. Goldwasser and David Letscher. A Python graphics package for the first day and beyond. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 40(3):326, September 2008. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic). Proceedings of ITiCSE '08.

Goldwasser:2008:TOO

[GL08c]

Michael H. Goldwasser and David Letscher. Teaching an object-oriented CS1 -: with Python. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 40(3):42–46, September 2008. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic). Proceedings of ITiCSE '08.

Goldwasser:2009:GPF

[GL09]

Michael H. Goldwasser and David Letscher. A graphics package for the first day and beyond. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 41(1):206–210, March 2009. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927

- (electronic). Proceedings of SIGCSE '09.
- Gorbovitski:2010:AAO**
- [GLS⁺10] Michael Gorbovitski, Yanhong A. Liu, Scott D. Stoller, Tom Rothamel, and Tuncay K. Tekle. Alias analysis for optimization of dynamic languages. *ACM SIGPLAN Notices*, 45(12):27–42, December 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- Gaete-Morales:2021:DPF**
- [GMKRS21] Carlos Gaete-Morales, Martin Kittel, Alexander Roth, and Wolf-Peter Schill. DIETERpy: a Python framework for the Dispatch and Investment Evaluation Tool with Endogenous Renewables. *SoftwareX*, 15(??):??, July 2021. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021000947>.
- Garcia:2021:IHG**
- [GMN21] Andrés Amaya García, David May, and Ed Nutting. Integrated hardware garbage collection. *ACM Transactions on Embedded Computing Systems*, 20(5):40:1–40:25, July 2021. CODEN ????? ISSN 1539-9087 (print), 1558-3465 (electronic). URL <https://dl.acm.org/doi/10.1145/3450147>.
- Gao:2020:JLM**
- [GMP⁺20] Kaifeng Gao, Gang Mei, Francesco Piccialli, Salvatore Cuomo, Jingzhi Tu, and Zenan Huo. Julia language in machine learning: Algorithms, applications, and open issues. *Computer Science Review*, 37:100254, August 2020. ISSN 1574-0137 (print), 1876-7745 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S157401372030071X>.
- Gavran:2017:AMR**
- [GMS17] Ivan Gavran, Rupak Majumdar, and Indranil Saha. Antlab: a multi-robot task server. *ACM Transactions on Embedded Computing Systems*, 16(5s):190:1–190:??, October 2017. CODEN ????? ISSN 1539-9087 (print), 1558-3465 (electronic).
- Gorelick:2014:HPP**
- [GO14] Micha Gorelick and Ian Ozsvald. *High performance Python*. O’Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2014. ISBN 1-4493-6159-5 (paperback). xv + 351 pp. LCCN QA76.73.P98 G67 2014.
- Govindaraj:2015:TDP**
- [Gov15] Siddharta Govindaraj. *Test-driven Python development*. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78398-792-8, 1-78398-793-6 (e-book). 264 pp. LCCN QA76.73.P98.

Giuffre:2022:NIP

- [GP22] Andrea Giuffre' and Matteo Pini. NiceProp: an interactive Python-based educational tool for non-ideal compressible fluid dynamics. *SoftwareX*, 17(??):??, January 2022. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021001527>. [Gra00]

Gotze:2021:UFP

- [GPP+21] Jan P. Götze, Yuan-Wei Pi, Simon Petry, Fabian Langkabel, Jan Felix Witte, and Oliver Lemke. A user-friendly, Python-based quantum mechanics/Gromacs interface: gmx2qmmm. *International Journal of Quantum Chemistry*, 121(3):e26486:1–e26486:??, February 5, 2021. CODEN IJQCB2. ISSN 0020-7608 (print), 1097-461X (electronic). [Gra18]

Gladstein:2018:SPF

- [GQCP+18] Ariella L. Gladstein, Consuelo D. Quinto-Cortés, Julian L. Pistorius, David Christy, Logan Gantner, and Blake L. Joyce. SimPrily: a Python framework to simplify high-throughput genomic simulations. *SoftwareX*, 7(??):335–340, January/June 2018. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711018301213>. [Gre16]

Grayson:2000:PTP

John E. Grayson. *Python and Tkinter Programming*. Manning Publications, Greenwich, CT, USA, 2000. ISBN 1-884777-81-3. xxiii + 658 pp. LCCN ???? US\$49.95.

Gray:2018:PQP

Johnnie Gray. quimb: a python package for quantum information and many-body calculations. *Journal of Open Source Software*, 3(29):819:1–819:3, September 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00819>.

Greenfield:2007:RSP

Perry Greenfield. Reaching for the stars with Python. *Computing in Science and Engineering*, 9(3):38–40, May/June 2007. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic). [Gre07]

Greenhill:2016:PPP

Simon J. Greenhill. **Phylogemetric:** a Python library for calculating phylogenetic network metrics. *Journal of Open Source Software*, 1(2):28:1, June 2016. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00028>.

Green:2018:PDP

Gregory M. Green. dustmaps: a Python interface for maps

of interstellar dust. *Journal of Open Source Software*, 3(26):695:1–695:2, June 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00695>.

Gronchi:2021:NTS

- [GRG21] Giorgio Gronchi, Marco Raglianti, and Fabio Giovannelli. Network theory and switching behaviors: a user guide for analyzing electronic records databases. *Future Internet*, 13(9):228, August 31, 2021. CODEN ????? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/9/228>. [GS12]

Gregor:2019:PGP

- [GRKN⁺19] Luke Gregor, Thomas J. Ryan-Keogh, Sarah-Anne Nicholson, Marcel du Plessis, Isabelle Giddy, and Sebastiaan Swart. *GliderTools*: a Python toolbox for processing underwater glider data. *Frontiers in Marine Science*, 6, December 2019. ISSN 2296-7745. [GTC21]

Groce:2020:Pc

- [Gro20] Alex Groce. Passages. *ACM SIGSOFT Software Engineering Notes*, 45(3):4–5, July 2020. URL <https://dl.acm.org/doi/10.1145/3402127.3402129>.

Gerum:2019:CPP

- [GRW⁺19] Richard C. Gerum, Sebastian Richter, Alexander Winterl, Christoph Mark, Ben Fabry, Céline Le Bohec, and Daniel P. [Gue18]

Zitterbart. *CameraTransform*: a Python package for perspective corrections and image mapping. *SoftwareX*, 10(??):Article 100333, July/December 2019. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711019302018>.

Gasiorek:2012:OPP

Marcin Gašiorek and Daniel Simson. One-peak posets with positive quadratic Tits form, their mesh translation quivers of roots, and programming in Maple and Python. *Linear Algebra and its Applications*, 436(7):2240–2272, April 1, 2012. CODEN LAA-PAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0024379511007555>.

Grilli:2021:NPS

Nicolò Grilli, Edmund Tarleton, and Alan C. F. Cocks. *Neper2CAE* and *PyCiGen*: Scripts to generate polycrystals and interface elements in Abaqus. *SoftwareX*, 13(??):Article 100651, January 2021. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020303642>.

Guelton:2018:PCP

Serge Guelton. *Pythran*: Crossing the Python fron-

- tier. *Computing in Science and Engineering*, 20(2):83–89, 2018. CODEN CSENF. ISSN 1521-9615 (print), 1558-366X (electronic). URL <https://ieeexplore.ieee.org/document/8317992/>. [Gut13]
- Gundecha:2014:LST**
- [Gun14] Unmesh Gundecha. *Learning Selenium testing tools with Python*. Packt Publishing, Birmingham, UK, 2014. ISBN 1-78398-350-7, 1-78398-351-5 (e-book), 1-322-56850-2 (e-book). 216 (est.) pp. LCCN QA76.73.P98. [Gut16]
- Gupta:2015:BWA**
- [Gup15] Sumit Gupta. *Building web applications with Python and Neo4j: develop exciting and real-world Python-based web applications with Neo4j using frameworks such as Flask, Py2neo, and Django*. Community experience distilled. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78398-398-1 (print), 1-78398-399-X (e-book). 184 (est.) pp. LCCN QA76.76.A65. URL <http://proquest.safaribooksonline.com/?fpi=9781783983988>. [Guz03]
- Gutschmidt:2004:GPP**
- [Gut04] Tom Gutschmidt. *Game programming with Python, Lua, and Ruby*. Premier Press, Boston, MA, USA, 2004. ISBN 1-59200-077-0, 1-59200-408-3 (e-book). xxvi + 437 pp. LCCN QA76.76.C672
- G88 2004b. URL <http://proquest.safaribooksonline.com/1592000770>.
- Gutttag:2013:ICP**
- John Gutttag. *Introduction to Computation and Programming Using Python*. MIT Press, Cambridge, MA, USA, 2013. ISBN 0-262-52500-3 (paperback), 0-262-31219-0. xiv + 298 pp. LCCN QA76.73.P98 G88 2013.
- Gutttag:2016:ICP**
- John Gutttag. *Introduction to Computation and Programming Using Python: with Application to Understanding Data*. MIT Press, Cambridge, MA, USA, second edition, 2016. ISBN 0-262-52962-9 (paperback), 0-262-33738-X (e-book). xvii + 447 pp. LCCN QA76.73.P98 G88 2016.
- Guzdial:2003:MCC**
- Mark Guzdial. A media computation course for non-majors. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 35(3):104–108, September 2003. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic).
- Gvero:2009:BRPb**
- [Gve09] Igor Gvero. Book review: *Python for Software Design* by Allen B. Downey, and published by Cambridge University Press, 2009, 978-0-521-

- 72596-5, 251pp. *ACM SIGSOFT Software Engineering Notes*, 34(6):31–32, November 2009. CODEN SFENDP. ISSN 0163-5948 (print), 1943-5843 (electronic). [HA20]
- [GWM18] Robert Gieseke, Sven N. Willner, and Matthias Mengel. Pymagicc: a Python wrapper for the simple climate model MAGICC. *Journal of Open Source Software*, 3(22):516:1–516:3, February 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00516>.
- [GWW09] Jonathan E. Guyer, Daniel Wheeler, and James A. Warren. FiPy: Partial differential equations with Python. *Computing in Science and Engineering*, 11(3):6–15, May/June 2009. CODEN CSENF. ISSN 1521-9615 (print), 1558-366X (electronic).
- [GZT⁺18] Nathan J. Goldbaum, John A. ZuHone, Matthew J. Turk, Kacper Kowalik, and Anna L. Rosen. unyt: Handle, manipulate, and convert data with units in Python. *Journal of Open Source Software*, 3(28):809:1–809:11, August 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00809>.
- [HAB⁺20] Josie Holmes, Iftekhhar Ahmed, Caius Brindescu, Rahul Gopinath, He Zhang, and Alex Groce. Using relative lines of code to guide automated test generation for Python. *ACM Transactions on Software Engineering and Methodology*, 29(4):28:1–28:38, October 2020. CODEN ATSMER. ISSN 1049-331X (print), 1557-7392 (electronic). URL <https://dl.acm.org/doi/10.1145/3408896>.
- [HAE00] Dick Hardt, Gisle Aas, and Paul Everitt. Perl, Python and Zope. In USENIX [USE00], page ?? ISBN 1-880446-17-0. LCCN ????? URL <http://www.usenix.org/publications/library/proceedings/als2000/aas.html>.
- Herrmann:2020:HRF**
Julien Herrmann and Guillaume Pallez (Aupy). H-Revolve: a framework for adjoint computation on synchronous hierarchical platforms. *ACM Transactions on Mathematical Software*, 46(2):12:1–12:25, June 2020. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3378672>.
- Gieseke:2018:PPP**
Robert Gieseke, Sven N. Willner, and Matthias Mengel. Pymagicc: a Python wrapper for the simple climate model MAGICC. *Journal of Open Source Software*, 3(22):516:1–516:3, February 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00516>.
- Guyet:2009:FPD**
Jonathan E. Guyer, Daniel Wheeler, and James A. Warren. FiPy: Partial differential equations with Python. *Computing in Science and Engineering*, 11(3):6–15, May/June 2009. CODEN CSENF. ISSN 1521-9615 (print), 1558-366X (electronic).
- Goldbaum:2018:PUH**
Nathan J. Goldbaum, John A. ZuHone, Matthew J. Turk, Kacper Kowalik, and Anna L. Rosen. unyt: Handle, manipulate, and convert data with units in Python. *Journal of Open Source Software*, 3(28):809:1–809:11, August 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00809>.
- Holmes:2020:URL**
Josie Holmes, Iftekhhar Ahmed, Caius Brindescu, Rahul Gopinath, He Zhang, and Alex Groce. Using relative lines of code to guide automated test generation for Python. *ACM Transactions on Software Engineering and Methodology*, 29(4):28:1–28:38, October 2020. CODEN ATSMER. ISSN 1049-331X (print), 1557-7392 (electronic). URL <https://dl.acm.org/doi/10.1145/3408896>.
- Hardt:2000:PPZ**
Dick Hardt, Gisle Aas, and Paul Everitt. Perl, Python and Zope. In USENIX [USE00], page ?? ISBN 1-880446-17-0. LCCN ????? URL <http://www.usenix.org/publications/library/proceedings/als2000/aas.html>.

Haghighi:2017:PPP

- [Hag17] Sepand Haghighi. Pyrgg: Python Random Graph Generator. *Journal of Open Source Software*, 2(17):331:1–331:2, September 2017. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00331>.

Huang:2018:ROO

- [HAGH18] Wen Huang, P.-A. Absil, Kyle A. Gallivan, and Paul Hand. ROPTLIB: an object-oriented C++ library for optimization on Riemannian manifolds. *ACM Transactions on Mathematical Software*, 44(4):43:1–43:21, August 2018. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL <https://dl.acm.org/citation.cfm?id=3218822>.

Hajji:2008:PPE

- [Haj08] Farid Hajji. *Das Python Praxisbuch — eBook: Der große Profi-Leitfaden für Programmierer*. Addison Wesley in Pearson Education Deutschland, München, Germany, 2008. ISBN 3-8273-6182-6. 1328 (est.) pp. LCCN ????

Hamilton:1998:PHM

- [Ham98] Michael Hamilton. The Python HTMLgen module. *Linux journal*, 55:22, 24–26, November 1998. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic). URL <ftp://ftp>.

ssc.com/pub/lj/listings/issue55/2986.tgz.

Handley:2018:PFP

- [Han18] Will Handley. fgivenx: a Python package for functional posterior plotting. *Journal of Open Source Software*, 3(28):849:1–849:4, August 2018. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00849>.

Harris:2007:GPL

- [Har07] Andy Harris. *Game programming: the L Line: the express line to learning*. Wiley, New York, NY, USA, 2007. ISBN 0-470-06822-1 (paperback). xxv + 570 pp. LCCN QA76.76.C672. URL <http://www.loc.gov/catdir/enhancements/fy0741/2006936755-b.html>; <http://www.loc.gov/catdir/enhancements/fy0741/2006936755-d.html>; <http://www.loc.gov/catdir/enhancements/fy0741/2006936755-t.html>.

Harwani:2012:IPP

- [Har12] B. M. Harwani. *Introduction to Python programming and developing GUI applications with PyQt*. Cengage Learning, Boston, MA, USA, 2012. ISBN 1-4354-6097-9, 1-4354-6098-7 (e-book). xv + 393 pp. LCCN QA76.73.P98 H37 2012aeb.

- [Har15] **Harris:2015:CSP**
Naftali Harris. Code snippet: **LazySorted**: a lazily, partially sorted Python list. *Journal of Statistical Software*, 65(CS-1):??, June 2015. CODEN JSSOBK. ISSN 1548-7660. URL <http://www.jstatsoft.org/v65/c01>.
- [Has16] **Haslwanter:2016:ISP**
Thomas Haslwanter. *An Introduction to Statistics with Python: With Applications in the Life Sciences*. Statistics and Computing. Springer International Publishing, Cham, Switzerland, 2016. ISBN 3-319-28315-4 (hardcover), 3-319-28316-2 (e-book). ISSN 1431-8784. xvii + 278 pp. LCCN QA276.4 .H38 2016.
- [HB16] **Holtgrewe:2016:PVP**
Manuel Holtgrewe and Dieter Beule. VCFPy: a Python 3 library with good support for both reading and writing VCF. *Journal of Open Source Software*, 1(6):85:1, October 2016. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00085>.
- [HBA⁺20] **Herring:2020:BPL**
Patrick Herring, Chirranjeevi Balaji Gopal, Muratahan Aykol, Joseph H. Montoya, Abraham Anapolsky, Peter M. Attia, William Gent, Jens S. Hummelshøj, Linda Hung, Ha-Kyung Kwon, Patrick Moore, Daniel Schweigert, Kristen A. Severson, Santosh Suram, Zi Yang, Richard D. Braatz, and Brian D. Storey. **BEEP**: a Python library for battery evaluation and early prediction. *SoftwareX*, 11(??):Article 100506, January/June 2020. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020300492>.
- [HBS⁺20] **Hadjidoukas:2020:TST**
P. E. Hadjidoukas, A. Bartzegazi, F. Scheidegger, R. Istrate, C. Bekas, and A. C. I. Malossi. **torcpy**: Supporting task parallelism in Python. *SoftwareX*, 12(??):Article 100517, July/December 2020. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020300091>.
- [HC16] **Helmus:2016:PAR**
Jonathan Helmus and Scott Collis. The Python ARM Radar Toolkit (Py-ART), a library for working with weather radar data in the Python programming language. *Journal of Open Research Software*, 4(1):e25-??, July 18, 2016. CODEN ???? ISSN 2049-9647. URL <https://openresearchsoftware.metajnl.com/articles/10.5334/jors.119/>.

- [HCPF95] **Huang:1995:CEM**
C. C. Huang, G. S. Couch, E. F. Pettersen, and T. E. Ferrin. Chimera: an extensible molecular modeling application constructed using standard components. In Hunter and Klein [HK95], pages 724–?? ISBN 981-02-2578-4. LCCN QH323.5.P33 1996. URL <http://www.cg1.ucsf.edu/psb/psb96/>.
- [Hen08] **Henderson:2008:AMC**
Peter B. Henderson. Abstraction, model checking and software correctness. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 40(2):23–24, June 2008. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic). URL <ftp://ftp.math.utah.edu/pub/mirrors/ftp.ira.uka.de/bibliography/Misc/DBLP/2008.bib>.
- [Her14] **Herman:2014:FSC**
Ted Herman. *A functional start to computing with Python*. Chapman and Hall/CRC textbooks in computing. CRC Press, Taylor and Francis, Boca Raton, FL, USA, 2014. ISBN 1-4665-0455-2 (paperback). xiv + 415 pp. LCCN QA76.73.P98 H47 2014.
- [Het02] **Hetland:2002:PP**
Magnus Lie Hetland. *Practical Python*. Apress, Berkeley, CA, USA, 2002. ISBN 1-59059-006-6. xxi + 619 pp. LCCN QA76.73.P98 H47 2002.
- [Het05] **Hetland:2005:BPB**
Magnus Lie Hetland. *Beginning Python: from novice to professional*. Apress, Berkeley, CA, USA, 2005. ISBN 1-59059-519-X. xxx + 604 pp. LCCN QA76.73.P98 H48 2005.
- [Het08] **Hetland:2008:BPB**
Magnus Lie Hetland. *Beginning Python: from novice to professional*. Apress, Berkeley, CA, USA, second edition, 2008. ISBN 1-59059-982-9. xxx + 656 pp. LCCN A76.73.P98 H48 2008eb.
- [Het10] **Hetland:2010:PAM**
Magnus Lie Hetland. *Python Algorithms: mastering basic algorithms in the Python Language*. Expert’s voice in open source. Apress, Berkeley, CA, USA, 2010. ISBN 1-4302-3237-4. xvi + 316 pp. LCCN QA76.73.P98 H485 2010. URL <http://www.loc.gov/catdir/enhancements/fy1502/2011287235-b.html>; <http://www.loc.gov/catdir/enhancements/fy1502/2011287235-d.html>; <http://www.loc.gov/catdir/toc/fy11pdf04/2011287235.html>.
- [Het14] **Hetland:2014:PAM**
Magnus Lie Hetland. *Python Algorithms: Mastering Basic Algorithms in the Python Language*. EBL-Schweitzer.

Apress, Berkeley, CA, USA, second edition, 2014. ISBN 1-4842-0055-1. 303 (est.) pp. LCCN QA75.5-76.95.

Harrison:2006:MSP

[HF06]

Guy Harrison and Steven Feuerstein. *MySQL stored procedure programming: building high-performance web applications with PHP, Perl, Python, Java & .NET*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2006. ISBN 0-596-10089-2. xxiii + 609 pp. LCCN QA76.73.S67 H377 2006eb; QA76.73.S67. URL <http://www.oreilly.com/catalog/9780596100896>.

Hahne:2021:APP

[HFB21]

Jens Hahne, Stephanie Friedhoff, and Matthias Bolten. Algorithm 1016: PyMGRIT: a Python package for the parallel-in-time method MGRIT. *ACM Transactions on Mathematical Software*, 47(2):19:1–19:22, April 2021. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL <https://dl.acm.org/doi/10.1145/3446979>.

Heusser:2017:PQP

[HFF⁺17]

Andrew C. Heusser, Paxton C. Fitzpatrick, Campbell E. Field, Kirsten Ziman, and Jeremy R. Man-

ning. Quail: a Python toolbox for analyzing and plotting free recall data. *Journal of Open Source Software*, 2(18):424:1–424:2, October 2017. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00424>.

Hammer:1997:ESI

[HGMC⁺97]

J. Hammer, H. Garcia-Molina, J. Cho, R. Aranha, Crespo, and A. Extracting semistructured information from the Web. In Anonymous [Ano97d], pages 18–25. ISBN ????? LCCN ?????

Hoyer:2017:PXL

[HH17]

Stephan Hoyer and Joe Hamman. *xarray: N-D labeled arrays and datasets in Python*. *Journal of Open Research Software*, 5(1):10–??, April 05, 2017. CODEN ????? ISSN 2049-9647. URL <https://openresearchsoftware.metajnl.com/articles/10.5334/jors.148/>.

Ho:2021:DSS

[HHJCRB21]

Anson T. Y. Ho, Kim P. Huynh, David T. Jacho-Chávez, and Diego Rojas-Baez. Data science in Stata 16: Frames, lasso, and Python integration. *Journal of Statistical Software*, 98(??):??, ????? 2021. CODEN JSSOBK. ISSN 1548-7660. URL <https://www.jstatsoft.org/index.php/jss/article/view/v098s01>;

<https://www.jstatsoft.org/index.php/jss/article/view/v098s01/v98s01.pdf>.

Hambruch:2009:MAT

- [HHK⁺09] Susanne Hambruch, Christoph Hoffmann, John T. Korb, Mark Haugan, and Antony L. Hosking. A multidisciplinary approach towards computational thinking for science majors. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 41(1):183–187, March 2009. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic). Proceedings of SIGCSE '09.

Holmgren:2018:PPP

- [HHM18] William F. Holmgren, Clifford W. Hansen, and Mark A. Mikofski. `pvl` python: a python package for modeling solar energy systems. *Journal of Open Source Software*, 3(29):884:1–884:3, September 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00884>.

Hynninen:2016:OOP

- [HHP⁺16] T. Hynninen, L. Himanen, V. Parkkinen, T. Musso, J. Corander, and A. S. Foster. An object oriented Python interface for atomistic simulations. *Computer Physics Communications*, 198(??):230–237, January 2016. CODEN CPHCBZ.

ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465515003483>.

He:2021:TPP

- [HHVB21] Xu He, Nicole Helbig, Matthieu J. Verstraete, and Eric Bousquet. TB2J: a Python package for computing magnetic interaction parameters. *Computer Physics Communications*, 264(??):Article 107938, July 2021. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465521000679>.

Hiam:2015:LBP

Alexander Hiam. *Learning BeagleBone Python programming: unleash the potential of BeagleBone using Python*. Community experience distilled. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78439-970-1, 1-78439-080-1 (e-book). ???? pp. LCCN QA76.73.P98.

Hightower:2003:PPJ

Richard Hightower. *Python programming with the Java class libraries: a tutorial for building Web and Enterprise applications with Jython*. Addison-Wesley, Reading, MA, USA, 2003. ISBN 0-201-61616-5. xii + 620 pp. LCCN QA76.73.P98 H54 2003.

- [Hil15a] **Hill:2015:LSP**
Christian Hill. *Learning scientific programming with Python*. Cambridge University Press, Cambridge, UK, 2015. ISBN 1-107-07541-6 (hardcover), 1-107-42822-X (paperback). vii + 452 pp. LCCN Q183.9 .H58 2015.
- [Hil15b] **Hilpisch:2015:PF**
Yves J. Hilpisch. *Python for finance*. O'Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol, CA 95472, USA, 2015. ISBN 1-4919-4528-1 (paperback), 1-4919-4539-7 (e-book). xv + 586 pp. LCCN HG176.5 H55 2015.
- [Hil20] **Hill:2020:LSPe**
Christian Hill. *Learning scientific programming with Python*. Cambridge University Press, Cambridge, UK, second edition, 2020. ISBN 1-108-74591-1. xi + 557 pp. LCCN Q183.9 .H58 2020.
- [Hin02] **Hinsen:2002:HLS**
K. Hinsen. High-level scientific programming with Python. *Lecture Notes in Computer Science*, 2331:691–??, 2002. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic). URL [http://link.springer-ny.com/link/service/series/](http://link.springer-ny.com/link/service/series/0558/bibs/2331/23310691.htm)0558/papers/2331/23310691.pdf.
- [Hin03] **Hinsen:2003:HLP**
Konrad Hinsen. High-level parallel software development with Python and BSP. *Parallel Processing Letters*, 13(3):473–??, September 2003. CODEN PPLTEE. ISSN 0129-6264 (print), 1793-642X (electronic).
- [Hin07] **Hinsen:2007:PSP**
Konrad Hinsen. Parallel scripting with Python. *Computing in Science and Engineering*, 9(6):82–89, November/December 2007. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).
- [HJHZ18] **Haghighi:2018:PPM**
Sepand Haghighi, Masoomeh Jasemi, Shaahin Hessabi, and Alireza Zolanvari. PyCM: Multiclass confusion matrix library in Python. *Journal of Open Source Software*, 3(25):729:1–729:2, May 2018. CODEN ????. ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00729>.
- [HJJ⁺22] **Heinrich:2022:ERP**
G. Heinrich, S. Jahn, S. P. Jones, M. Kerner, F. Langer, V. Magerya, A. Pöldaru, J. Schlenk, and E. Villa. Expansion by regions with pySecDec. *Computer Physics Communications*, 273(??):Article

- 108267, April 2022. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465521003799>. [HKM08]
- [HJPB17] **Hazelton:2017:PPI**
 Bryna J. Hazelton, Daniel C. Jacobs, Jonathan C. Pober, and Adam P. Beardsley. *pyvdata: an interface for astronomical interferometric datasets in python*. *Journal of Open Source Software*, 2(10):140:1, February 2017. CODEN ????. ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00140>.
- [HK95] **Hunter:1995:PSB**
 Lawrence Hunter and Teri E. Klein, editors. *Pacific Symposium on Biocomputing '96: Hawaii, USA, 3-6 January, 1996*. World Scientific Publishing Co., Singapore; Philadelphia, PA, USA; River Edge, NJ, USA, 1995. ISBN 981-02-2578-4. LCCN QH323.5.P33 1996. URL <http://www.cgl.ucsf.edu/psb/psb96/>.
- [HK15] **Hosmer:2015:PPN**
 Chet Hosmer and Gary C. Kessler, editors. *Passive Python network mapping: P2NMAP*. Syngress Publishing, Inc., Rockland, MA, USA, 2015. ISBN 0-12-802721-5, 0-12-802742-8 (e-book). LCCN TK5105.59 .H67 2015.
- Holovaty:2008:DGD**
 Adrian Holovaty and Jacob Kaplan-Moss. *The Definitive Guide to Django: Web Development Done Right*. Springer eBook Collection Professional and Applied Computing [Dig. Serial]; Springer-12059 [Dig. Serial]. Apress, Berkeley, CA, USA, 2008. ISBN 1-59059-725-7. xxxii + 447 pp. LCCN TK5105.888.
- [HLR15] **Hughes:2015:PSS**
 Adam Hughes, Zhaowen Liu, and M. Reeves. *Scikit-spectra: Explorative spectroscopy in Python*. *Journal of Open Research Software*, 3(1):e6-??, June 05, 2015. CODEN ????. ISSN 2049-9647. URL <https://openresearchsoftware.metajnl.com/articles/10.5334/jors.11>.
- [HLS006] **Hinsen:2006:UBP**
 Konrad Hinsen, Hans Petter Langtangen, Ola Skavhaug, and Åsmund Ødegård. Using BSP and Python to simplify parallel programming. *Future Generation Computer Systems*, 22(1-2):123-157, January 2006. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic).
- [HM18] **Hwang:2018:CAC**
 John T. Hwang and Joaquim R. R. A. Martins. A computational architecture for coupling heterogeneous numerical models and computing coupled

derivatives. *ACM Transactions on Mathematical Software*, 44 (4):37:1–37:39, August 2018. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL <https://dl.acm.org/citation.cfm?id=3182393>. [How98]

Hylton:1996:KPS

[HMD⁺96] J. Hylton, K. Manheimer, F. L. Drake, Jr., B. Warsaw, R. Masse, and G. van Rossum. Knowbot programming: system support for mobile agents. In Cabrera and Islam [CI96], pages 8–13. ISBN 0-8186-7693-0. LCCN QA 76.76 O63 I59 1996. IEEE catalog number 96TB100089. [How06]

Hosmer:2012:GSS

[Hos12] Ben Hosmer. Getting started with Salt Stack — the other configuration management system built with Python. *Linux journal*, 2012(223):3:1–3:??, November 2012. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic). [HPH12]

Hosmer:2014:PFW

[Hos14] Chet Hosmer. *Python Forensics: a workbench for inventing and sharing digital forensic technology*. Syn- gress Publishing, Inc., Rock- land, MA, USA, 2014. ISBN 0-12-418683-1, 0-12-418676-9. xxviii + 318 pp. LCCN ???? URL <http://proquest.safaribooksonline.com/9780124186767>. [HPT⁺16]

Howes:1998:TPC

Brad Howes. Template pro- cessing classes for Python. *Dr. Dobb's Journal of Software Tools*, 23(2):38, 40, 42, 44–46, 48, 100, February 1998. CO- DEN DDJOEB. ISSN 1044- 789X.

Howard:2006:MYS

Mike Howard. Maybe you should use Python. *login: the USENIX Associ- ation newsletter*, 31(5):??, October 2006. CODEN LOGNEM. ISSN 1044- 6397. URL <https://www.usenix.org/publications/login/october-2006-volume-31-number-5/maybe-you-should-use-python>.

Hirschfeld:2012:EUC

Robert Hirschfeld, Michael Perscheid, and Michael Haupt. Explicit use-case representa- tion in object-oriented pro- gramming languages. *ACM SIGPLAN Notices*, 47(2):51– 60, February 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hermann:2016:SNU

Gunter Hermann, Vincent Pohl, Jean Christophe Trem- blay, Beate Paulus, Hans- Christian Hege, and Axel Schild. Software news and updates: ORBKIT: a modu- lar Python toolbox for cross- platform postprocessing of

- quantum chemical wavefunction data. *Journal of Computational Chemistry*, 37(16): 1511–1520, June 15, 2016. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic). [HR20]
- [HQF⁺20] Philipp Höllmer, Liang Qin, Michael F. Faulkner, A. C. Maggs, and Werner Krauth. JeLLyFysh — version 1.0 — a Python application for all-atom event-chain Monte Carlo. *Computer Physics Communications*, 253(?):Article 107168, August 2020. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465520300254>. [HRS06]
- [HR00] Mark Hammond and Andy Robinson. *Python Programming on Win32: Help for Windows Programmers*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, January 2000. ISBN 1-56592-621-8 (paperback), 1-56592-925-X (e-book). xvii + 652 pp. LCCN QA76.73.P98 H36 2000. US\$34.95. URL <http://www.oreilly.com/catalog/pythonwin32>. [HS12]
- [HS13] Mark Hammond and Andy Robinson. *Python Programming on Win32: Help for Windows Programmers*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, January 2000. ISBN 1-56592-621-8 (paperback), 1-56592-925-X (e-book). xvii + 652 pp. LCCN QA76.73.P98 H36 2000. US\$34.95. URL <http://www.oreilly.com/catalog/pythonwin32>. [HS13]
- [Hart:2020:MSM] Kenneth A. Hart and Julian J. Rimoli. MicroStructPy: a statistical microstructure mesh generator in Python. *SoftwareX*, 12(?):Article 100595, July/December 2020. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020303083>.
- [Holt:2006:IPF] Alexander Holt, Sarah Rauchas, and Ian Sanders. Introducing Python into the first year curriculum at Wits. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 38(3):335, September 2006. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic).
- [Homescu:2012:HTJ] Andrei Homescu and Alex Suhan. HappyJIT: a tracing JIT compiler for PHP. *ACM SIGPLAN Notices*, 47(2):25–36, February 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- [Hu:2013:UPH] Helen H. Hu and Tricia D. Shepherd. Using POGIL to help students learn to program. *ACM Transactions on Computing Education*, 13(3):13:1–13:??, August 2013. CODEN ????? ISSN 1946-6226.

- Heath:1997:PES**
- [HTA⁺97] Michael Heath, Virginia Torczon, Greg Astfalk, Petter E. Bjørstad, Alan H. Karp, Charles H. Koelbel, Vipin Kumar, Robert F. Lucas, Layne T. Watson, and David E. Womble, editors. *Proceedings of the Eighth SIAM Conference on Parallel Processing for Scientific Computing. Held in Minneapolis, MN, March 14–17, 1997*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 1997. CODEN PSSCFK. ISBN 0-89871-395-1. LCCN ????. CD-ROM for Windows, Macintosh and UNIX; no paper form published.
- Herath:2020:PPL**
- [HTH⁺20] Uthpala Herath, Pedram Tavadze, Xu He, Eric Bousquet, Sobhit Singh, Francisco Muñoz, and Aldo H. Romero. PyProcar: a Python library for electronic structure pre/post-processing. *Computer Physics Communications*, 251(??):Article 107080, June 2020. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465519303935>.
- Herman:2017:PSO**
- [HU17] Jon Herman and Will Usher. SALib: an open-source Python library for sensitivity analysis. *Journal of Open Source Software*, 2(9):97:1–97:2, January 2017. CODEN ????. ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00097>.
- Hucka:2018:PNN**
- [Huc18] Michael Hucka. Nostril: a nonsense string evaluator written in Python. *Journal of Open Source Software*, 3(25):596:1–596:2, May 2018. CODEN ????. ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00596>.
- Hugunin:1997:PJB**
- [Hug97] Jim Hugunin. Python and Java: The best of both worlds. Discusses an implementation of the Python scripting language in Java. The article and the code are available electronically., 1997. URL <http://www.python.org/jpython/>.
- Hughes:1999:LP**
- [Hug99] Phil Hughes. Learning Python. *Linux journal*, 66:??, October 1999. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic). URL <http://noframes.linuxjournal.com/lj-issues/issue66/3541.html>.
- Hughes:2001:BRP**
- [Hug01] Phil Hughes. Book reviews: *Python Developer’s Handbook*. *Linux journal*, 82:180, February 2001. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).

Hughes:2014:PPI

- [Hug14] Adam Hughes. `pyparty`: Intuitive particle processing in Python. *Journal of Open Research Software*, 2(1):e26–??, September 23, 2014. CODEN ????? ISSN 2049-9647. URL <https://openresearchsoftware.metajnl.com/articles/10.5334/jors.bh/>. [HYG16]

Hughes:2018:PMP

- [Hug18] Momar G-O Hughes. `MCycle`: a Python package for 1D sizing and analysis of thermodynamic power cycles. *Journal of Open Source Software*, 3(28):710:1–710:2, August 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00710>.

Huang:2021:PAC

- [HWJ⁺21] Sitao Huang, Kun Wu, Hyunmin Jeong, Chengyue Wang, Deming Chen, and Wen-Mei Hwu. `PyLog`: An algorithm-centric Python-based FPGA programming and synthesis flow. *IEEE Transactions on Computers*, 70(12):2015–2028, December 2021. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

Humer:2015:DSL

- [HWW⁺15] Christian Humer, Christian Wimmer, Christian Wirth, Andreas Wöß, and Thomas Würthinger. A domain-

specific language for building self-optimizing AST interpreters. *ACM SIGPLAN Notices*, 50(3):123–132, March 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Hewitt:2016:MWA

Brett Hewitt, Moi Hoon Yap, and Robyn Grant. Manual Whisker Annotator (MWA): A modular open-source tool. *Journal of Open Research Software*, 4(1):e16–??, April 28, 2016. CODEN ????? ISSN 2049-9647. URL <https://openresearchsoftware.metajnl.com/articles/10.5334/jors.93/>.

Ivezic:2014:SDM

- [ICVG14] Željko Ivezić, Andrew (Andrew J.) Connolly, Jacob T. VanderPlas, and Alexander (Alexander G.) Gray. *Statistics, data mining, and machine learning in astronomy: a practical Python guide for the analysis of survey data*. Princeton series in modern observational astronomy. Princeton University Press, Princeton, NJ, USA, 2014. ISBN 0-691-15168-7. x + 540 pp. LCCN QB51.3.E43 S72 2014. URL <http://www.loc.gov/catdir/enhancements/fy1410/2013951369-b.html>; <http://www.loc.gov/catdir/enhancements/fy1410/2013951369-d.html>.

- [Idr14] Idris:2014:PDA Ivan Idris. *Python data analysis: learn how to apply powerful data analysis techniques with popular open source Python modules*. Community experience distilled. Packt Publishing, Birmingham, UK, 2014. ISBN 1-78355-335-9, 1-78355-336-7 (e-book). v + 329 pp. LCCN QA76.73.P98 I37 2014.
- [IG19] Isaacs:2019:PCL K. E. Isaacs and T. Gamblin. Preserving command line workflow for a package management system using ASCII DAG visualization. *IEEE Transactions on Visualization and Computer Graphics*, 25(9):2804–2820, September 2019. CODEN ITVGEA. ISSN 1077-2626.
- [IEE97a] IEEE:1997:PIP IEEE, editor. *Proceedings. 11th International Parallel Processing Symposium, April 1–5, 1997, Geneva, Switzerland*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1997. ISBN 0-8186-7793-7. LCCN QA76.58 .I56 1997. IEEE catalog number 97TB100107. IEEE Computer Society Press order number PR07792.
- [IEE97b] IEEE:1997:PAP IEEE, editor. *Proceedings. Asia Pacific Software Engineering Conference and International Computer Science Conference: December 2–5, 1997, Hong Kong*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1997. ISBN 0-8186-8271-X. LCCN QA76.758.A77 1997. IEEE catalog number 97TB100207. IEEE Computer Society order number PR08271.
- [Ish17] Ishizaki:2012:ADT Kazuaki Ishizaki, Takeshi Ogasawara, Jose Castanos, Priya Nagpurkar, David Edelson, and Toshio Nakatani. Adding dynamically-typed language support to a statically-typed language compiler: performance evaluation, analysis, and tradeoffs. *ACM SIGPLAN Notices*, 47(7):169–180, July 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). VEE '12 conference proceedings.
- [Ish17] Ishak:2017:BRsA B. Ishak. Book review: *Statistics, data mining, and machine learning in astronomy: a practical Python guide for the analysis of survey data*, by Zeljko Ivezić, Andrew J. Connolly, Jacob T. VanderPlas and Alexander Gray. *Contemporary Physics*, 58(1):99, 2017. CODEN CTPHAF. ISSN 0010-7514 (print), 1366-5812 (electronic).

- [Ish19] **Ishak:2019:BRS** B. Ishak. Book review: *A student's guide to Python for physical modeling*. *Contemporary Physics*, 60(1):88–89, 2019. CODEN CTPHAF. ISSN 0010-7514 (print), 1366-5812 (electronic).
- [ISMA18] **Izzo:2018:VMT** [Jan10] Richard Izzo, David Steinman, Simone Manini, and Luca Antiga. The vascular modeling toolkit: a Python library for the analysis of tubular structures in medical images. *Journal of Open Source Software*, 3(25):745:1–745:5, May 2018. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00745>.
- [Jac02] **Jackson:2002:PPI** [JČMG11] Keith R. Jackson. pyGlobus: a Python interface to the Globus Toolkit TM. *Concurrency and Computation: Practice and Experience*, 14(13–15):1075–1083, November/December 2002. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).
- [JAGP14] **Jacobs:2014:PPP** [JCY+19] Christian Jacobs, Alexandros Avidis, Gerard Gorman, and Matthew Piggott. PyRDM: a Python-based library for automating the management and online publication of scientific software and data. *Journal of Open Research Software*, 2(1):e28–??, October 03, 2014. CODEN ???? ISSN 2049-9647. URL <https://openresearchsoftware.metajnl.com/articles/10.5334/jors.1111>.
- Jankowski:2010:BRBa** [Jan10] Richard Jankowski. Book review: *Data Structures and Algorithms Using Python and C++*, by David M. Reed and John Zelle Franklin, Beedle and Associates 2009. *ACM SIGACT News*, 41(1):13–15, March 2010. CODEN SIGNDM. ISSN 0163-5700 (print), 1943-5827 (electronic). See [RZ09].
- Joyner:2011:OSC** [JČMG11] David Joyner, Ondřej Čertík, Aaron Meurer, and Brian E. Granger. Open source computer algebra systems: SymPy. *ACM Communications in Computer Algebra*, 45(3–4):225–234, September 2011. CODEN ???? ISSN 1932-2232 (print), 1932-2240 (electronic).
- Jeong:2019:SSG** [JCY+19] Eunji Jeong, Sungwoo Cho, Gyeong-In Yu, Joo Seong Jeong, Dong-Jin Shin, Taebum Kim, and Byung-Gon Chun. Speculative symbolic graph execution of imperative deep learning programs. *Operating Systems Review*, 53(1):26–33, July 2019. CODEN OSRED8.

ISSN 0163-5980 (print), 1943-586X (electronic).

Jones:2002:PX

- [JD02] Christopher A. Jones and Fred L. Drake. *Python and XML*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2002. ISBN 0-596-00128-2. xvi + 360 pp. LCCN QA76.73.P98 J66 2002.

James:2018:PDP

- [JEC18] Ryan G. James, Christopher J. Ellison, and James P. Crutchfield. *dit*: a Python package for discrete information theory. *Journal of Open Source Software*, 3(25):738:1–738:3, May 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00738>.

Jimenez:2017:PPB

- [JG17] José Jiménez and Josep Ginebra. *pyGPGO*: Bayesian optimization for Python. *Journal of Open Source Software*, 2(19):431:1–431:3, November 2017. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00431>.

Joksas:2020:BPT

- [JM20] Dovydas Joksas and Adnan Mehonic. *badcrossbar*: a Python tool for computing

and plotting currents and voltages in passive crossbar arrays. *SoftwareX*, 12(??):Article 100617, July/December 2020. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020303307>.

Johansson:2012:QOS

- [JNN12] J. R. Johansson, P. D. Nation, and Franco Nori. QuTiP: an open-source Python framework for the dynamics of open quantum systems. *Computer Physics Communications*, 183(8):1760–1772, August 2012. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465512000835>.

Johansson:2013:QPF

- [JNN13] J. R. Johansson, P. D. Nation, and Franco Nori. QuTiP 2: a Python framework for the dynamics of open quantum systems. *Computer Physics Communications*, 184(4):1234–1240, April 2013. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465512003955>.

Johnson:1997:BRI

- [Joh97] Dwight Johnson. Book review: *Internet Programming with Python*. *Linux journal*,

- 42:??, October 1997. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic). [Jos15]
 URL <http://www.ssc.com/lj/issue42/2152.html>. See book [WvA96].
- [Joh08] **Johnson:2008:EPC**
 Mark Johnson. *Essential Python for corpus linguistics*. Blackwell, Oxford, UK, 2008. ISBN 1-4051-4563-3 (hardcover), 1-4051-4564-1 (paperback). 208 pp. LCCN ????
- [Joh12] **Johnson:2012:CIP**
 Mark J. (Mark James) Johnson. *A concise introduction to programming in Python*. Chapman and Hall/CRC textbooks in computing. CRC Press, 2000 N.W. Corporate Blvd., Boca Raton, FL 33431-9868, USA, 2012. ISBN 1-4398-9694-1 (paperback). xi + 205 pp. LCCN QA76.73.P98 J64 2012.
- [Joh15] **Johansson:2015:NPP**
 Robert Johansson. *Numerical Python: a Practical Techniques Approach for Industry*. The expert's voice in PYTHON; Books for professionals by professionals. Apress, Berkeley, CA, USA, 2015. ISBN 1-4842-0554-5 (paperback), 1-4842-0553-7 (e-book). xxii + 487 pp. LCCN ???? URL <http://www.gbv.de/dms/tib-ub-hannover/841207984.pdf>.
- Joshi:2015:OPE**
 Prateek Joshi. *OpenCV with Python by example: build real-world computer vision applications and develop cool demos using OpenCV for Python*. Community experience distilled. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78528-393-6, 1-78528-987-X. 296 (est.) pp. LCCN QA76.73.P98. URL <http://proquest.safaribooksonline.com/?fpi=9781785283932>.
- Joshi:2016:JDS**
 Anshul Joshi. *Julia for data science: explore the world of data science from scratch with Julia by your side*. Packt Publishing, Birmingham, UK, 2016. ISBN 1-78355-386-3 (e-book), 1-78528-969-1. 339 pp. LCCN QA76.73.J8; T55.4-60.8.
- [JPOB20] **Jiang:2020:PPF**
 S. Jiang, P. Pan, Y. Ou, and C. Batten. PyMTL3: a Python framework for open-source hardware modeling, generation, simulation, and verification. *IEEE Micro*, 40(4):58–66, July/August 2020. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic).
- [JWHS16] **Jirjies:2016:PPI**
 Saman Jirjies, Garrick Wallstrom, Rolf U. Halden, and Matthew Scotch. pyJacqQ: Python implementation of

Jacquez's Q -statistics for space-time clustering of disease exposure in case-control studies. *Journal of Statistical Software*, 74(??):??, ????. 2016. CODEN JSSOBK. ISSN 1548-7660. URL <https://www.jstatsoft.org/index.php/jss/article/view/v074i06>; <https://www.jstatsoft.org/index.php/jss/article/view/v074i06/v74i06.pdf>. [Kas15]

Kak:2008:SOC

[Kak08] Avinash C. Kak. *Scripting with objects: a comparative presentation of object-oriented scripting with Perl and Python*. Wiley, New York, NY, USA, 2008. ISBN 0-470-17923-6 (paperback). xxxiv + 1279 pp. LCCN QA76.64.K3555; QA76.64.K3555 2008. US\$89.95. URL <http://www.loc.gov/catdir/enhancements/fy0743/2007035480-d.html>; <http://www.loc.gov/catdir/enhancements/fy0808/2007035480-b.html>; <http://www.loc.gov/catdir/enhancements/fy0835/2007035480-t.html>. [KB07] [KB18]

Karkera:2014:BPG

[Kar14] Kiran R. Karkera. *Building probabilistic graphical models with Python solve machine learning problems using probabilistic graphical models implemented in Python with real-world applications*. Community experience distilled. Packt Publishing, Birmingham, UK, 2014. ISBN 1-78328-900-7, 1-78328-901-5 (e-

book), 1-306-90287-8 (e-book). LCCN QA279 K37 2014. URL <http://proquest.tech.safaribooksonline.de/9781783289004>. [Kas15]

Kasampalis:2015:MPD

Sakis Kasampalis. *Mastering Python design patterns*. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78398-932-7, 1-78398-933-5 (e-book). LCCN QA76.73.P98 K37 2015.

Krauss:2007:PMM

Ryan W. Krauss and Wayne J. Book. A Python module for modeling and control design of flexible robots. *Computing in Science and Engineering*, 9(3): 41–45, May/June 2007. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).

Krebber:2018:PMP

Manuel Krebber and Henrik Barthels. MatchPy: Pattern matching in Python. *Journal of Open Source Software*, 3(26):670:1–670:2, June 2018. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00670>.

Kortbeek:2020:BEB

Vito Kortbeek, Abu Bakar, Stefany Cruz, Kasim Sinan Yildirim, Przemysław Pawełczak, and Josiah Hester. BFree: Enabling battery-free sensor prototyping with Python. *Proceedings of the ACM on In-*

teractive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), 4(4):135:1–135:39, December 2020. CODEN ????. ISSN 2474-9567 (electronic). URL <https://dl.acm.org/doi/10.1145/3432191>.

Kundu:2018:PPA

- [KBLJ18] Sudipta Kundu, Satadeep Bhattacharjee, Seung-Cheol Lee, and Manish Jain. PASTA: Python Algorithms for Searching Transition states. *Computer Physics Communications*, 233(??):261–268, December 2018. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465518302583>. [KHD⁺16]

Khatri:2011:MBC

- [KCS11] Sujata Khatri, R. S. Chhillar, and V. B. Singh. Measuring bug complexity in object oriented software system. *ACM SIGSOFT Software Engineering Notes*, 36(6):1–8, November 2011. CODEN SFENDP. ISSN 0163-5948 (print), 1943-5843 (electronic).

Kuchling:1999:PT

- [KD99] Andrew Kuchling and Fred Drake, editors. *Python tutorial*. toExcel, San Jose, CA, 1999. ISBN 1-58348-375-6 (soft cover). ????. LCCN ????. [KI19]

Konda:2018:TPT

- [KDC⁺18] Pradap Konda, Sanjib Das,

Paul Suganthan G. C., Philip Martinkus, Adel Ardalani, Jeffrey R. Ballard, Yash Govind, Han Li, Fatemah Panahi, Haojun Zhang, Jeff Naughton, Shishir Prasad, Ganesh Krishnan, Rohit Deep, and Vijay Raghavendra. Technical perspective: Toward building entity matching management systems. *SIGMOD Record (ACM Special Interest Group on Management of Data)*, 47(1):33–40, March 2018. CODEN SRECD8. ISSN 0163-5808 (print), 1943-5835 (electronic).

Korosov:2016:PNS

Anton Korosov, Morten Hansen, Knut-Frode Dagestad, Asuka Yamakawa, Aleksander Vines, and Maik Riechert. Nansat: a scientist-orientated Python package for geospatial data processing. *Journal of Open Research Software*, 4(1):e39–??, October 24, 2016. CODEN ????. ISSN 2049-9647. URL <https://openresearchsoftware.metajnl.com/articles/10.5334/jors.120/>.

Kuhring:2019:CBO

Lucas Kuhring and Zsolt István. I can't believe it's not (only) software!: bionic distributed storage for Parquet files. *Proceedings of the VLDB Endowment*, 12(12):1838–1841, August 2019. CODEN ????. ISSN 2150-8097.

- [Kin05] Ken Kinder. Event-driven programming with Twisted and Python. *Linux journal*, 2005 (131):??, March 2005. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic). **Kinder:2005:EDP**
- [Kin09] Jason M. Kinser. *Python for bioinformatics*. Jones and Bartlett series in biomedical informatics. Jones and Bartlett Publishers, Sudbury, MA, USA, 2009. ISBN 0-7637-5186-3. xvii + 417 pp. LCCN QH324.2.K55; QH324.2.K55 2009. **Kinser:2009:PB**
- [Kir04] Robert C. Kirby. Algorithm 839: FIAT, a new paradigm for computing finite element basis functions. *ACM Transactions on Mathematical Software*, 30(4):502–516, December 2004. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). **Kirby:2004:AFN**
- [Kiu10] Jaan Kiusalaas. *Numerical methods in engineering with Python*. Cambridge University Press, Cambridge, UK, second edition, 2010. ISBN 0-521-19132-7 (hardcover). x + 422 pp. LCCN TA345 .K584 2010. **Kiusalaas:2010:NME**
- [Kiu13] Jaan Kiusalaas. *Numerical methods in engineering with Python 3*. Cambridge University Press, Cambridge, UK, 2013. ISBN 1-107-03385-3. xi + 423 pp. LCCN TA345 .K584 2013. **Kiusalaas:2013:NME**
- [KJ14] Marcin Korzeń and Szymon Jaroszewicz. PaCAL: a Python package for arithmetic computations with random variables. *Journal of Statistical Software*, 57(10):??, May 2014. CODEN JSSOBK. ISSN 1548-7660. URL <http://www.jstatsoft.org/v57/i10>. **Korzen:2014:PPP**
- [KJ15] Jacqueline Kazil and Katharine Jarmul. *Data Wrangling Using Python*. O’Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2015. ISBN 1-4919-4881-7. ???? pp. LCCN ????. **Kazil:2015:DWU**
- [KL97] Hyeon Jong Kim and Ki Ho Lee. Design and implementation of Web documents creating system with HTML-supporting library. *Journal of KISS(C) (Computing Practices)*, 3(4):375–383, August 1997. CODEN CKNCFY. ISSN 1226-2293. **Kim:1997:DIW**
- [Kla99] Ron Klatchko. Dynamically reconfigurable servers: Python’s extensibility makes

it easy. *Dr. Dobb's Journal of Software Tools*, 24(1):80, 82–84, January 1999. CODEN DDJOEB. ISSN 1044-789X. URL http://www.ddj.com/ddj/ftp/1999/1999_01/cprofile.zip.

Klaver:2011:PC

[Kla11]

Adrian Klaver. Python in the cloud. *Linux journal*, 2011 (210):7:1–7:??, October 2011. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).

Koulouri:2014:TIP

[KLM14]

Theodora Koulouri, Stanislao Lauria, and Robert D. Maredie. Teaching introductory programming: a quantitative evaluation of different approaches. *ACM Transactions on Computing Education*, 14(4):26:1–26:??, December 2014. CODEN ???? ISSN 1946-6226.

Koulouri:2015:TIP

[KLM15]

Theodora Koulouri, Stanislao Lauria, and Robert D. Maredie. Teaching introductory programming: a quantitative evaluation of different approaches. *ACM Transactions on Computing Education*, 14(4):26:1–26:??, February 2015. CODEN ???? ISSN 1946-6226.

Kinsley:2015:BPG

[KM15]

Harrison Kinsley and Will McGugan. *Beginning Python Games Development: With Pygame*. SpringerLink: Bücher.

Apress, Berkeley, CA, USA, second edition, 2015. ISBN 1-4842-0970-2, 1-4842-0971-0. xxii + 308 + 53 pp. LCCN QA75.5-76.95. URL <http://www.springerlink.com/content/978-1-4842-0970-7>.

Krishnamoorthy:2021:EPL

[KMK⁺21]

Aravind Krishnamoorthy, Ankit Mishra, Deepak Kamal, Sungwook Hong, Ken ichi Nomura, Subodh Tiwari, Aichiro Nakano, Rajiv Kalia, Rampi Ramprasad, and Priya Vashishta. EZFF: Python library for multi-objective parameterization and uncertainty quantification of interatomic forcefields for molecular dynamics. *SoftwareX*, 13(??):Article 100663, January 2021. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S235271102100008X>.

Kinder:2015:SGP

[KN15]

Jesse M. Kinder and Philip Charles Nelson. *A student's guide to Python for physical modeling*. Princeton University Press, Princeton, NJ, USA, 2015. ISBN 0-691-16958-6 (hardback), 0-691-17050-9 (paperback). xiii + 139 pp. LCCN QA76.73.P98 K54 2015.

Knowlton:2008:PCM

[Kno08]

Jim Knowlton. *Python: create-modify-reuse*. Wrox programmer to programmer. Wiley,

New York, NY, USA, 2008. ISBN 0-470-25932-9. xxv + 261 pp. LCCN ????

Kormanyos:2011:APC

[Kor11]

Christopher Kormanyos. Algorithm 910: a portable C++ multiple-precision system for special-function calculations. *ACM Transactions on Mathematical Software*, 37(4):45:1–45:27, February 2011. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

[KS21]

[//www.sciencedirect.com/science/article/pii/S187775031730738X](http://www.sciencedirect.com/science/article/pii/S187775031730738X).

Karam:2021:BPS

Mokbel Karam and Tony Saad. BuckinghamPy: a Python software for dimensional analysis. *SoftwareX*, 16(??):??, December 2021. CODEN ????. ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021001291>.

Kirsanskas:2017:QOS

[KPK+17]

Gediminas Kirsanskas, Jonas Nyvold Pedersen, Olov Karlström, Martin Leijnse, and Andreas Wacker. QmeQ 1.0: an open-source Python package for calculations of transport through quantum dot devices. *Computer Physics Communications*, 221(??):317–342, December 2017. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465517302515>.

[KSB12]

Klarner:2012:TSD

Hannes Klarner, Heike Siebert, and Alexander Bockmayr. Time series dependent analysis of unparametrized Thomas networks. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, 9(5):1338–1351, September 2012. CODEN ITCBCY. ISSN 1545-5963 (print), 1557-9964 (electronic).

Koenka:2014:IOS

[KRH18]

Thomas Kemmer, Sergej Rjasanow, and Andreas Hildebrandt. NESSie.jl: Efficient and intuitive finite element and boundary element methods for nonlocal protein electrostatics in the Julia language. *Journal of Computational Science*, 28:193–203, 2018. ISSN 1877-7503. URL <https://www.sciencedirect.com/science/article/pii/S1877750318302112>.

[KSH14]

Israel Joel Koenka, Jorge Sáiz, and Peter C. Hauser. Instrumentino: an open-source modular Python framework for controlling Arduino based experimental instruments. *Computer Physics Communications*, 185(10):2724–2729, October 2014. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465514002112>.

- [KSS20] **Karam:2020:PPS**
Mokbel Karam, James C. Sutherland, and Tony Saad. PyModPDE: a Python software for modified equation analysis. *SoftwareX*, 12 (??):Article 100541, July/December 2020. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020300224>.
- [Kuc97] **Kuchling:1997:PU**
Andrew Kuchling. Python update. *Linux journal*, 37:??, May 1997. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).
- [Kuc98a] **Kuchling:1998:LIG**
Andrew Kuchling. LJ interviews Guido van Rossum. *Linux journal*, 55:18, 20–21, November 1998. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).
- [Kuc98b] **Kuchling:1998:CFP**
Andrew M. Kuchling. A CGI framework in Python. *Web Techniques*, 3(2):43–46, February 1998. CODEN WETEFA. ISSN 1086-556X. URL <http://www.webtechniques.com/features/1998/02/kuchling/kuchling.shtml>.
- [Kuc98c] **Kuchling:1998:PDA**
Andrew M. Kuchling. The Python DB-API. *Linux journal*, 49:??, May 1998. CO-
- DEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).
- [KVSC21] **Klymenko:2021:NEP**
M. V. Klymenko, J. A. Vaitkus, J. S. Smith, and J. H. Cole. NanoNET: an extendable Python framework for semi-empirical tight-binding models. *Computer Physics Communications*, 259 (??):Article 107676, February 2021. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465520303283>.
- [LA99] **Lutz:1999:LP**
Mark Lutz and David Ascher. *Learning Python*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 1999. ISBN 1-56592-464-9. xvi + 366 pp. LCCN QA76.73.P98 L8798 1999. US\$29.95. URL <http://www.oreilly.com/catalog/9781565924642>; <http://www.oreilly.com/catalog/lpython/>.
- [LA04] **Lutz:2004:LP**
Mark Lutz and David Ascher. *Learning Python*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman

- Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, second edition, 2004. ISBN 0-596-00281-5. xxvi + 591 pp. LCCN QA76.73.P98 L877 2004. URL <http://www.oreilly.com/catalog/9780596002817>.
- [Lac06] **Lacheiner:2006:EPB**
Hermann Lacheiner. Entwicklung einer auf Python basierenden Rich Client Platform für Linux. (German) [Development of a Python-based Rich Client Platform for Linux]. Diplome-Arbeit, Universität Linz, Linz, Austria, 2006. v + 86 pp.
- [LAG07] **Lutz:2007:EPM**
Mark Lutz, David Ascher, and Dinu C.. Gherman. *Einführung in Python: [moderne OO-Programmierung; behandelt Python 2.5]*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, second edition, 2007. ISBN 3-89721-488-1. xxvii + 624 pp. LCCN ????. EUR 39.90. URL <http://www.gbv.de/dms/ilmenau/toc/527924601.PDF>.
- [Lak17] **Lakshminarayanan:2017:BRL**
Vasudevan Lakshminarayanan. Book review: *Learning scientific programming with Python*, by Christian Hill. *Contemporary Physics*, 58(3):282–284, 2017. CODEN CTPHAF. ISSN 0010-7514 (print), 1366-5812 (electronic).
- [Lam15] **Lambert:2015:PPT**
Kenneth Alfred Lambert. *Python programming for teens*. Cengage Learning PTR, Boston, MA, USA, 2015. ISBN 1-305-27195-5 (paperback), 1-305-27196-3 (e-book). xxviii + 243 pp. LCCN QA76.73.P98 L338 2015.
- [Lan06] **Langtangen:2006:PSC**
Hans Petter Langtangen. *Python scripting for computational science*, volume 3 of *Texts in computational science and engineering*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., second edition, 2006. ISBN 3-540-29415-5. xxiv + 736 pp. LCCN ????
- [Lan07] **Langtangen:2007:PSC**
Hans Petter Langtangen. *Python scripting for computational science*, volume 3 of *Texts in computational science and engineering*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., third edition, 2007. ISBN 3-540-73915-7. ????. LCCN ????
- [Lan08] **Langtangen:2008:PSC**
Hans Petter Langtangen. *Python Scripting for Computational Science*, volume 3 of *Springer eBook Collection*

Mathematics and Statistics [Dig. Serial]; Springer-11649 [Dig. Serial]; Texts in Computational Science and Engineering. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., third edition, 2008. ISBN 3-540-73915-7, 3-540-73916-5. xxiv + 750 pp. LCCN ????

Langtangen:2009:PSP

[Lan09]

Hans Petter Langtangen. *A primer on scientific programming with Python*, volume 6 of *Texts in computational science and engineering*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2009. ISBN 3-642-02475-0, 3-642-02474-2. ISSN 1611-0994. xxvii + 693 pp. LCCN QA76.73.P98 L286 2009.

Langtangen:2011:PSP

[Lan11]

Hans Petter Langtangen. *A primer on scientific programming with Python*, volume 6 of *Texts in computational science and engineering*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., second edition, 2011. ISBN 3-642-18365-4, 3-642-18366-2 (e-book). xxix + 699 pp. LCCN QA76.73.P98 L36 2011.

Langtangen:2012:PSP

[Lan12]

Hans Petter Langtangen. *A primer on scientific programming with Python*, volume 6 of *Texts in computational science*

and engineering. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., third edition, 2012. ISBN 3-642-30292-0, 3-642-30293-9 (e-book). ISSN 1611-0994. LCCN QA76.73.P98 L36 2012.

Lanaro:2013:PHP

[Lan13]

Gabriele Lanaro. *Python high performance programming: boost the performance of your Python programs using advanced techniques*. Packt Publishing, Birmingham, UK, 2013. ISBN 1-78328-845-0 (paperback), 1-306-25426-4 (e-book). 95 pp. LCCN QA76.73 .P98. URL <http://proquest.tech.safaribooksonline.de/9781783288458>.■

Lawhead:2015:QPP

[Law15]

Joel Lawhead. *QGIS Python programming cookbook: over 140 recipes to help you turn QGIS from a desktop GIS tool into a powerful automated geospatial framework*. Community Experience Distilled. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78398-498-8, 1-78398-499-6 (e-book). xii + 315 pp. LCCN QA76.73.P98 .L394 2015.

Layton:2015:LDM

[Lay15]

Robert Layton. *Learning data mining with Python: harness the power of Python to analyze data and create insightful predictive models*. Community experience distilled. Packt

- Publishing, Birmingham, UK, 2015. ISBN 1-78439-605-2 (paper), 1-78439-120-4 (e-book). xiv + 317 pp. LCCN QA76.73.P98 L39 2015.
- [LDW⁺21] **Luo:2021:CPC**
 Chenxing Luo, Xin Deng, Wenzhong Wang, Gaurav Shukla, Zhongqing Wu, and Renata M. Wentzcovitch. *cij*: a Python code for quasiharmonic thermoelasticity. *Computer Physics Communications*, 267(??):Article 108067, October 2021. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S001046552100179X>.
- [LC11] **List:2011:FUT**
 Michael List and David Car. A Fortran unit-testing framework utilizing templating and the PyF95++ toolset. *ACM Fortran Forum*, 30(1):3–15, April 2011. CODEN ???? ISSN 1061-7264 (print), 1931-1311 (electronic).
- [LD07] **Luszczek:2007:HPD**
 Piotr Luszczek and Jack Dongarra. High performance development for high end computing with Python Language Wrapper (PLW). *The International Journal of High Performance Computing Applications*, 21(3):360–369, August 2007. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL <http://hpc.sagepub.com/content/21/3/360.full.pdf+html>.
- [LDAL20] **Loraamm:2020:PTV**
 Rebecca Loraamm, Joni Downs, James Anderson, and David S. Lamb. PySTPrism: Tools for voxel-based space-time prisms. *SoftwareX*, 12(??): Article 100499, July/December 2020. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711019303309>.
- [Lee11] **Lee:2011:PPF**
 Kent D. Lee. *Python programming fundamentals*. Undergraduate topics in computer science. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2011. ISBN 1-84996-536-6, 1-84996-537-4 (e-book). xii + 241 pp. LCCN QA76.73.P98 L44 2011.
- [Lee17] **Leeman:2017:BRS**
 John R. Leeman. Book review: *A Student's Guide to Python for Physical Modeling*. Kinder, Jesse M., and Nelson, Philip. 150 pp. Princeton U.P., Princeton, NJ, 2016. Price: \$24.95 (paper). ISBN 978-0-691-17050-3. *American Journal of Physics*, 85(5):399, May 2017. CODEN AJPIAS. ISSN 0002-9505 (print), 1943-2909 (electronic).

- Lentin:2015:LRU**
- [Len15] Joseph Lentin. *Learning robotics using Python: design, simulate, program, and prototype an interactive autonomous mobile robot from scratch with the help of Python, ROS, and Open-CV!* Community experience distilled. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78328-753-5, 1-68015-749-3 (e-book). xiii + 303 pp. LCCN TJ211.495 .L46 2015.
- LeVeque:2009:PTR**
- [LeV09] Randall J. LeVeque. Python tools for reproducible research on hyperbolic problems. *Computing in Science and Engineering*, 11(1):19–27, January/February 2009. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).
- Lewis:2009:HPP**
- [Lew09] Andrew Lewis. *High performance Python*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2009. ISBN 0-596-15996-X. ??? pp. LCCN ???
- Lambert:2011:PBO**
- [LFN⁺11] Emmanuel Lambert, Martin Fiers, Shavkat Nizamov, Martijn Tassaert, Steven G. Johnson, Peter Bienstman, and Wim Bogaerts. Python bindings for the Open Source Electromagnetic Simulator Meep. *Computing in Science and Engineering*, 13(3):53–65, May/June 2011. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).
- Lister:2009:FER**
- [LFT09] Raymond Lister, Colin Fidge, and Donna Teague. Further evidence of a relationship between explaining, tracing and writing skills in introductory programming. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 41(3):161–165, September 2009. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic). Proceedings of ITiCSE '09.
- Lyden:2021:PPM**
- [LFT21] Andrew Lyden, Graeme Flett, and Paul G. Tuohy. PyLESA: a Python modelling tool for planning-level Local, integrated, and smart Energy Systems Analysis. *SoftwareX*, 14(??):??, June 2021. CODEN ??? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021000443>.
- Liu:2010:LFI**
- [LGS10] Yanhong A. Liu, Michael Gorbovitski, and Scott D. Stoller. A language and framework for invariant-driven transformations. *ACM SIGPLAN Notices*, 45(2):55–64, February

2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Lunnikivi:2020:TPR

- [LH20] Henri Lunnikivi and Kai Jylkkä-Timo Hämäläinen. Transpiling Python to Rust for optimized performance. In *Embedded Computer Systems: Architectures, Modeling, and Simulation: 20th International Conference, SAMOS 2020, Samos, Greece, July 5–9, 2020, Proceedings*, pages 127–138. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2020. URL http://link.springer.com/chapter/10.1007/978-3-030-60939-9_9.

Libeskind-Hadas:2014:CBP

- [LHB14] Ran Libeskind-Hadas and Eliot Christen Bush. *Computing for biologists: Python programming and principles*. Cambridge University Press, Cambridge, UK, 2014. ISBN 1-107-04282-8 (hardcover), 1-107-64218-3 (paperback). x + 207 pp. LCCN QH324.2 .L53 2014. URL <http://www.cambridge.org/us/academic/subjects/life-sciences/genomics-bioinformatics-and-systems-biology/computing-biologists-python-programming-and-principles>.

Lee:2021:PPB

- [LHH⁺21] In Seong Lee, Jong-Kwon Ha, Daeho Han, Tae In Kim,

Sung Wook Moon, and Seung Kyu Min. PyUNIxMD: a Python-based excited state molecular dynamics package. *Journal of Computational Chemistry*, 42(24):1755–1766, September 15, 2021. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).

Logaras:2014:PAE

Evangelos Logaras, Orsalia G. Hazapis, and Elias S. Manolakos. Python to accelerate embedded SoC design: a case study for systems biology. *ACM Transactions on Embedded Computing Systems*, 13(4):84:1–84:??, February 2014. CODEN ????? ISSN 1539-9087 (print), 1558-3465 (electronic).

Lindblad:2006:PP

Erik Lindblad. *Programming i Python*. Studentlitteratur, Lund, Sweden, 2006. ISBN 91-44-04520-4. 406 pp. LCCN ????

Lingl:2006:PKC

Gregor Lingl. *Python für Kids: [mit CD ; auf CD: aktuelles Python 2.5, das Grafik-Modul turtle und alle Programmbeispiele]*. bhv, Redline, Heidelberg, Germany, second edition, 2006. ISBN 3-8266-8622-5. 416 pp. LCCN ????? EUR 19.95.

Lipovetsky:2021:BRlB

Stan Lipovetsky. Book review: *Linear Models with Python*,

Faraway Julian J.. Boca Raton, FL, Chapman and Hall/CRC, Taylor & Francis Group, 2021, 308 pp., 85 b/w illustrations, \$99.95 (Hardback), ISBN: 978-1-138-48395-8. *Technometrics*, 63(3):426–427, 2021. CODEN TCMTA2. ISSN 0040-1706 (print), 1537-2723 (electronic).

Lipovetsky:2022:BRH

[Lip22]

Stan Lipovetsky. Book review: *Handbook of Regression Modeling in People Analytics: With Examples in R and Python*, by Keith McNulty. CRC Press, Taylor & Francis Group, Boca Raton, FL, 2021, ISBN 978-1-032-04174-2, xvi + 255 pp., 48 color illustrations, \$63.96 (hbk). *Technometrics*, 64(1):143–145, 2022. CODEN TCMTA2. ISSN 0040-1706 (print), 1537-2723 (electronic).

Li:2019:AOP

[LJ19]

Yangguang Li and Zhen Ming (Jack) Jiang. Assessing and optimizing the performance impact of the just-in-time configuration parameters — a case study on PyPy. *Empirical Software Engineering*, 24(4):2323–2363, August 2019. CODEN ESENFV. ISSN 1382-3256 (print), 1573-7616 (electronic). URL <http://link.springer.com/article/10.1007/s10664-019-09691-z>.

Li:2021:ICM

[LKJC21]

Yong Li, Shoaib Kamil, Alec

Jacobson, and Yotam Cingold. I[HEART]LA: compilable markdown for linear algebra. *ACM Transactions on Graphics*, 40(6):264:1–264:14, December 2021. CODEN ATGRDF. ISSN 0730-0301 (print), 1557-7368 (electronic). URL <https://dl.acm.org/doi/10.1145/3478513.3480506>.

Litvin:2008:MDA

[LL08]

Maria Litvin and Gary Litvin. *Mathematics for the digital age and programming in Python*. Skylight Pub., Andover, MA, USA, 2008. ISBN 0-9727055-8-9. ??? pp. LCCN ??? URL <http://lccn.loc.gov/2007930214>.

Luporini:2020:APD

[LLL⁺20]

Fabio Luporini, Mathias Louboutin, Michael Lange, Navjot Kukreja, Philipp Witte, Jan Hückelheim, Charles Yount, Paul H. J. Kelly, Felix J. Herrmann, and Gerard J. Gorman. Architecture and performance of Devito, a system for automated stencil computation. *ACM Transactions on Mathematical Software*, 46(1):6:1–6:28, April 2020. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3374916>.

Langtangen:2003:UDP

[LM03]

H. P. Langtangen and K.-A. Mardal. Using Diffpack from Python scripts. In Langtangen

and Tveito [LT03], pages 321–360. CODEN LNCSA6. ISBN 3-540-01438-1 (print), 3-642-18237-2 (e-book). ISSN 1439-7358. LCCN QA377 .A45 2003. URL http://link.springer.com/content/pdf/10.1007/978-3-642-18237-2_8.

Logg:2012:ASD

[LMW12]

Anders Logg, Kent-Andre Mardal, and Garth Wells, editors. *Automated Solution of Differential Equations by the Finite Element Method: The FEniCS Book*, volume 84 of *Lecture Notes in Computational Science and Engineering*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2012. CODEN LNCSA6. ISBN 3-642-23098-9 (print), 3-642-23099-7 (e-book). ISSN 1439-7358. xiii + 723 pp. LCCN ???? URL <http://fenicsproject.org>; <http://fenicsproject.org/book/>; <http://link.springer.com/book/10.1007/978-3-642-23099-8>; <http://www.springerlink.com/content/978-3-642-23099-8>; <https://launchpad.net/fenics-book>. The software developed by the FEniCS Project is free for all to use and modify (licensed under the GNU (L)GPL), and so is this book.

Lobianco:2019:JQS

[Lob19]

Antonello Lobianco. *Julia quick syntax reference: a pocket guide for data science*

programming. Apress, Berkeley, CA, USA, 2019. ISBN 1-4842-5189-X, 1-4842-5190-3 (e-book). xvii + 216 + 66 pp. LCCN QA76.73.J85. URL <http://link.springer.com/book/10.1007/978-1-4842-5190-4>.

Long:2008:SAR

[Lon08]

Philip D. Long. Scalable apprenticeships: reconnecting students through technology. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 40(3):3–4, September 2008. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic). Proceedings of ITiCSE '08.

Lott:2014:MOO

[Lot14a]

Steven F. Lott. *Mastering object-oriented Python: grasp the intricacies of object-oriented programming in Python in order to efficiently build powerful real-world applications*. Community expertise distilled. Packt Publishing, Birmingham, UK, 2014. ISBN 1-78328-097-2, 1-78328-098-0 (e-book). xii + 609 pp. LCCN QA76.73.P98 L688 2014. URL <http://proquest.safaribooksonline.com/?fpi=9781783280971>.

Lott:2014:PSA

[Lot14b]

Steven F. Lott. *Python for secret agents: analyze, encrypt, and uncover intelligence data using Python, the*

- essential tool for all aspiring secret agents.* Community experience distilled. Packt Publishing, Birmingham, UK, 2014. ISBN 1-78398-042-7 (paperback), 1-78398-043-5 (e-book). v + 197 pp. LCCN TK5105.8883.
- [Lot15a] Steven Lott. *Functional Python programming.* Packt Publishing, Birmingham, UK, 2015. ISBN 1-78439-699-0, 1-78439-761-X (e-book). 361 (est.) pp. LCCN QA76.73.P98 .L688 2015.
- [Lot15b] Steven F. Lott. *Python essentials: modernize existing Python code and plan code migrations to Python using this definitive guide.* Community experience distilled. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78439-814-4, 1-78439-034-8. xiv + 271 pp. LCCN ????
- [LP19] Ratan Lal and Pavithra Prabhakar. Counterexample guided abstraction refinement for polyhedral probabilistic hybrid systems. *ACM Transactions on Embedded Computing Systems*, 18(5s):98:1–98:??, October 2019. CODEN ????? ISSN 1539-9087 (print), 1558-3465 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3358217.
- [LR14] Félix López and Víctor Romero. *Mastering Python regular expressions: leverage regular expressions in Python even for the most complex features.* Community experience distilled. Packt Publishing, Birmingham, UK, 2014. ISBN 1-78328-315-7 (paperback), 1-78328-316-5 (e-book). iii + 93 pp. LCCN QA76.73.P98 L67 2014. URL <http://proquest.safaribooksonline.com/?fpi=9781783283156>.
- [LRPD18] Jason Laura, Kelvin Rodriguez, Adam C. Paquette, and Evin Dunn. AutoCNet: a Python library for sparse multi-image correspondence identification for planetary data. *SoftwareX*, 7(??):34–36, January/June 2018. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S235271101830013X>.
- [LRvE17] Anders Lervik, Enrico Ricciardi, and Titus S. van Erp. Software news and updates: PyRETIS: a well-done, medium-sized Python library for rare events. *Journal of Computational Chemistry*, 38(28):2439–2451, October 30, 2017. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).

- [LS97] **Laird:1997:CSL**
Cameron Laird and Kathryn Soraiz. Choosing a scripting language: Perl, Tcl, and Python: they're not your father's scripting languages. *SunWorld online*, ??(??):??, October 1997. ISSN 1091-8914. URL <http://www.sun.com/sunworldonline/swol-10-1997/swol-10-scripting.html>. [LT03]
- [LS98] **Laird:1998:GTW**
Cameron Laird and Kathryn Soraiz. GUI toolkits: What are your options? an overview of today's best-bet GUI toolkits. *SunWorld online*, ??(??):??, March 1998. ISSN 1091-8914. URL <http://www.sun.com/sunworldonline/swol-02-1998/swol-02-python.html>. Discusses Python.
- [LS16] **Leskovec:2016:SGP**
Jure Leskovec and Rok Susic. SNAP: a general-purpose network analysis and graph-mining library. *ACM Transactions on Intelligent Systems and Technology (TIST)*, 8(1):1:1–1:??, October 2016. CODEN ????? ISSN 2157-6904 (print), 2157-6912 (electronic). [Lub14]
- [LS17] **Lyonnet:2017:PPT**
F. Lyonnet and I. Schienbein. PyR@TE 2: a Python tool for computing RGEs at two-loop. *Computer Physics Communications*, 213(??):181–196, April 2017. CODEN CPHCBZ. [Lun01]
- ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S001046551630368X>.
- Langtangen:2003:ATC**
Hans Petter Langtangen and Aslak Tveito, editors. *Advanced Topics in Computational Partial Differential Equations: Numerical Methods and Diffpack Programming*, volume 33 of *Lecture Notes in Computational Science and Engineering*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2003. CODEN LNCSA6. ISBN 3-540-01438-1 (print), 3-642-18237-2 (e-book). ISSN 1439-7358. LCCN QA377 .A45 2003. URL <http://link.springer.com/book/10.1007/978-3-642-18237-2>; <http://www.diffpack.com/Book>; <http://www.springerlink.com/content/978-3-642-18237-2>.
- Lubanovic:2014:IPM**
Bill Lubanovic. *Introducing Python: modern computing in simple packages*. O'Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol, CA 95472, USA, 2014. ISBN 1-4493-5936-1 (paperback), 1-4493-6119-6 (e-book), 1-4493-6118-8 (e-book). xx + 454 pp. LCCN QA76.73.P98 L83 2015.
- Lundh:2001:PSL**
Fredrik Lundh. *Python Stan-*

ard Library. Nutshell handbook. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, May 2001. ISBN 0-596-00096-0. xvi + 281 pp. LCCN QA76.73.P98 L86 2001. US\$29.95. URL <http://www.oreilly.com/catalog/pythonsl>.

Lutz:1996:PP

[Lut96]

Mark Lutz. *Programming Python*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, Fall 1996. ISBN 1-56592-197-6, 0-585-03222-X (e-book). xxii + 880 pp. LCCN QA76.73.P98 L88 1996. US\$39.95. URL <http://shell.rmi.net/~lutz/>; <http://www.oreilly.com/catalog/python>. Also available in Japanese translation, see <http://www.oreilly.co.jp/BOOK/python1.htm>.

Lutz:1998:POO

[Lut98a]

Mark Lutz. Python: an object oriented scripting language. In Peter H. Salus, editor, *Handbook of Programming Languages*, page 120 (est.). Macmillan Publishing Company, New York, NY, USA, 1998. ISBN 1-57870-

008-6 (vol. 1), 1-57870-009-4 (vol. 2), 1-57870-010-8 (vol. 3), 1-57870-011-6 (vol. 4). LCCN QA76.7 .H363 1998. URL <http://shell.rmi.net/~lutz/whatsnew.html#S13>.

Lutz:1998:PPR

[Lut98b]

Mark Lutz. *Python Pocket Reference*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 1998. ISBN 1-56592-500-9. iii + 75 pp. LCCN QA76.73.P98 L882 1998. US\$6.95. URL <http://www.oreilly.com/catalog/9781565925007>; <http://www.oreilly.com/catalog/pythonpr/>.

Lutz:1999:UP

[Lut99]

Mark Lutz. Using Python. *login: the USENIX Association newsletter*, 24(1s): ??, January 1999. CODEN LOGNEM. ISSN 1044-6397. URL <http://www.usenix.org/publications/login/1999-1/python.html>. Special issue on tools.

Lutz:2001:PPO

[Lut01]

Mark Lutz. *Programming Python: Object-Oriented Scripting*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge,

MA 02140, USA, Tel: +1 617 354 5800, second edition, March 2001. ISBN 0-596-00085-5. xxxvii + 1255 pp. LCCN QA76.73.P98 L88 2001. US\$54.95. URL <http://www.oreilly.com/catalog/9780596000851>; <http://www.oreilly.com/catalog/python2>. Includes CD-ROM.

Lutz:2002:PPR

[Lut02]

Mark Lutz. *Python Pocket Reference*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, second edition, 2002. ISBN 0-596-00189-4. iv + 124 pp. LCCN QA76.73.P98 L89 2002. US\$11.95. URL <http://safari.oreilly.com/0596001894>; <http://www.oreilly.com/catalog/9780596001896>; <http://www.oreilly.com/catalog/pythonpr2>.

Lutz:2005:PPR

[Lut05]

Mark Lutz. *Python pocket reference*. O'Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol, CA 95472, USA, third edition, 2005. ISBN 0-596-00940-2 (paperback). ix + 148 pp. LCCN QA76.73.P98 L89 2005. URL <http://www.oreilly.com/catalog/9780596009403>.

Lutz:2006:PP

[Lut06]

Mark Lutz. *Programming*

Python. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, third edition, 2006. ISBN 0-596-00925-9. xlii + 1552 pp. LCCN QA76.73.P98 L88 2006eb; QA76.73.P98 L88 2006; QA76.73.P98. URL <http://www.oreilly.com/catalog/9780596009250>.

Lutz:2008:LP

[Lut08]

Mark Lutz. *Learning Python*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, third edition, 2008. ISBN 0-596-51398-4, 0-596-51398-4. xlv + 700 pp. LCCN QA76.73.P98 L877 2008; QA76.73.P98 L877 2008eb; QA76.73.P98 L8798 2008; QA76.73.P98. URL <http://www.oreilly.com/catalog/9780596513986>.

Lutz:2009:LPa

[Lut09a]

Mark Lutz. *Learning Python*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, fourth edition, 2009. ISBN 0-596-15806-8 (paper-

- back). xlix + 1160 pp. LCCN QA76.73.P98 L877 2009.
- [Lut09b] **Lutz:2009:LPb**
 Mark Lutz. *Learning Python*. O'Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol, CA 95472, USA, fourth edition, 2009. ISBN 0-596-80539-X. ???? pp. LCCN QA76.73.P98 L877 2009.
- [Lut13] **Lutz:2013:LP**
 Mark Lutz. *Learning Python*. O'Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol, CA 95472, USA, fifth edition, 2013. ISBN 1-4493-5573-0. 1 + 1540 pp. LCCN QA76.73.P98 L877 2013. URL <http://proquestcombo.safaribooksonline.com/9781449355722>.
- [Lut14] **Lutz:2014:PPR**
 Mark Lutz. *Python pocket reference*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, fifth edition, 2014. ISBN 1-4493-5701-6 (paperback). vii + 254 pp. LCCN QA76.73.P98 L89 2014.
- [LV20] **Lauter:2020:FSA**
 Christoph Lauter and Anastasia Volkova. A framework for semi-automatic precision and accuracy analysis for fast and rigorous deep learning. In Cornea et al. [CLT20], pages 103–110. ISBN 1-72817-120-2, 1-72817-121-0. ISSN 2576-2265. LCCN ????. URL <https://ieeexplore.ieee.org/servlet/opac?punumber=9146973>.
- [LVH⁺18] **Li:2018:PTP**
 Xinya Li, Chris R. Vernon, Mohamad I. Hejazi, Robert P. Link, Zhongwei Huang, Lu Liu, and Leyang Feng. Tethys — a Python package for spatial and temporal downscaling of global water withdrawals. *Journal of Open Research Software*, 6(1):9–??, February 09, 2018. CODEN ????. ISSN 2049-9647. URL <https://openresearchsoftware.metajnl.com/articles/10.5334/jors.197/>.
- [LW10] **Logg:2010:DAF**
 Anders Logg and Garth N. Wells. DOLFIN: Automated finite element computing. *ACM Transactions on Mathematical Software*, 37(2):20:1–20:28, April 2010. CODEN ACM-SCU. ISSN 0098-3500 (print), 1557-7295 (electronic).
- [LWH⁺10] **Lee:2010:JSD**
 Byeongcheol Lee, Ben Wiedermann, Martin Hirzel, Robert Grimm, and Kathryn S. McKinley. Jinn: synthesizing dynamic bug detectors for foreign language interfaces. *ACM SIGPLAN Notices*, 45(6):36–49, June 2010. CODEN SIN-ODQ. ISSN 0362-1340 (print),

1523-2867 (print), 1558-1160 (electronic).

Logg:2012:DCP

- [LWH12] Anders Logg, Garth N. Wells, and Johan Hake. DOLFIN: a C++/Python finite element library. In Logg et al. [LMW12], pages 173–225. CODEN LNCSEA6. ISBN 3-642-23098-9 (print), 3-642-23099-7 (e-book). ISSN 1439-7358. LCCN ???? URL http://link.springer.com/content/pdf/10.1007/978-3-642-23099-8_10. The software developed by the FEniCS Project is free for all to use and modify (licensed under the GNU (L)GPL), and so is this book.

Lym:2020:PMT

- [LWV20] Jonathan Lym, Gerhard R. Wittreich, and Dionisios G. Vlachos. A Python Multi-scale Thermochemistry Toolbox (pMuTT) for thermochemical and kinetic parameter estimation. *Computer Physics Communications*, 247 (??):Article 106864, February 2020. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465519302516>.

Liu:2018:PPB

- [LYX⁺18] Benyuan Liu, Bin Yang, Canhua Xu, Junying Xia, Meng Dai, Zhenyu Ji, Fusheng You, Xiuzhen Dong, Xuetao Shi,

and Feng Fu. pyEIT: a python based framework for Electrical Impedance Tomography. *SoftwareX*, 7(??):304–308, January/June 2018. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711018301407>.

Millman:2011:PSE

- [MA11] K. Jarrod Millman and Michael Aivazis. Python for scientists and engineers. *Computing in Science and Engineering*, 13 (2):9–12, March/April 2011. CODEN CSENF6. ISSN 1521-9615 (print), 1558-366X (electronic).

MacLachlan:1991:CCL

- [Mac91] Rob MacLachlan. CMU Common Lisp user’s manual. Research paper CMU-CS-91-108, School of Computer Science, Carnegie Mellon University, Pittsburgh, PA, USA, February 1991. vi + 168 pp. This is a revised version of Technical Report CMU-CS-87-156.

MacLachlan:1992:CCL

- [Mac92a] Rob MacLachlan. CMU Common Lisp user’s manual. Research paper CMU-CS-92-161, School of Computer Science, Carnegie Mellon University, Pittsburgh, PA, USA, July 1992. v + 142 pp. Supersedes Technical Reports CMU-CS-87-156 and CMU-CS-91-108.

MacLachlan:1992:PCC

- [Mac92b] Robert A. MacLachlan. Python compiler for CMU Common Lisp. In ACM [ACM92], pages 235–246. ISBN 0-89791-483-X, 0-89791-481-3. LCCN QA76.73.L23A26 1992. Also published as *LISP Pointers*, vol. V, no. 1, January-March, 1992. ACM order no. 552920.

Muller:2014:SAP

- [MAC14] Stefan C. Muller, Gustavo Alonso, and Andre Csilaghy. Scaling astrophysics: Python + automatic parallelization. *Computer*, 47(9):41–47, September 2014. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic). URL <http://csdl.computer.org/csdl/mags/co/2014/09/mco2014090041-abs.html>.

Macleod:2021:GPP

- [MAC⁺21] Duncan M. Macleod, Joseph S. Areeda, Scott B. Coughlin, Thomas J. Massinger, and Alexander L. Urban. Gwpy: a Python package for gravitational-wave astrophysics. *SoftwareX*, 13(??):Article 100657, January 2021. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021000029>.

Madhavan:2015:MPD

- [Mad15] Samir Madhavan. *Mastering Python for data science: explore the world of data sci-*

ence through Python and learn how to make sense of data. Community experience distilled. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78439-015-1, 1-78439-262-6 (e-book). ???? pp. LCCN QA76.73.P98. URL <http://proquest.safaribooksonline.com/?fpi=9781784390150>.

Mandanici:2021:SPG

- [MAFM21] A. Mandanici, S. Alessandro Sarà, G. Fiumara, and G. Mandaglio. Studying physics, getting to know Python: RC circuit, simple experiments, coding, and data analysis with Raspberry Pi. *Computing in Science and Engineering*, 23(1):93–96, 2021. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).

Mattson:2021:PPM

- [MAG21] Timothy G. Mattson, Todd A. Anderson, and Giorgis Georgakoudis. PyOMP: Multi-threaded parallel programming in Python. *Computing in Science and Engineering*, 23(6):77–80, November/December 2021. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).

Martelli:2002:PC

- [Mar02] David Ascher Alex Martelli, editor. *Python Cookbook*. O’Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1

707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2002. ISBN 0-596-00167-3. xxix + 574 pp. LCCN QA76.73.P98 P983 2002 Stacks. US\$39.95. URL <http://safari.oreilly.com/> 0596001673; <http://www.oreilly.com/catalog/pythoncook>.

Martelli:2003:PN

[Mar03]

Alex Martelli. *Python in a nutshell*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2003. ISBN 0-596-00188-6. xv + 636 pp. LCCN QA76.73.P98 M37 2003. URL <http://www.oreilly.com/catalog/9780596001889>.

Martelli:2006:PN

[Mar06]

Alex Martelli. *Python in a nutshell*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, second edition, 2006. ISBN 0-596-10046-9. xiv + 695 pp. LCCN QA76.73.P98 M37 2006eb; QA76.73.P98 M37 2006; QA76.73.P98. URL <http://www.oreilly.com/catalog/9780596100469>.

Martelli:2007:PC

[Mar07]

Alex Martelli. *Python en con-*

centré. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, second edition, 2007. ISBN 2-84177-452-X. xvi + 802 pp. LCCN ????? French translation by Éric Jacoboni and Yann Serra.

Margolis:2017:PSP

[Mar17]

Benjamin W. L. Margolis. SimuPy: a Python framework for modeling and simulating dynamical systems. *Journal of Open Source Software*, 2(17):396:1, September 2017. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00396>.

Marowka:2018:PAH

[Mar18]

Ami Marowka. Python accelerators for high-performance computing. *The Journal of Supercomputing*, 74(4):1449–1460, April 2018. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic).

Matloff:2016:BRN

[Mat16]

Norman Matloff. Book review: *Numerical Python: a Practical Techniques Approach for Industry*. *Journal of Statistical Software*, 70(??):??, ????? 2016. CODEN JSSOBK. ISSN 1548-7660. URL <https://www.jstatsoft.org/index.php/jss/article/view/v070b04>;

- <https://www.jstatsoft.org/index.php/jss/article/view/v070b04/v70b04.pdf>. [MB07]
- [Mau02] W. Douglas Maurer. The comparative programming languages course: a new chain of development. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 34(1):336–340, March 2002. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic). Inroads: paving the way towards excellence in computing education. [MB17]
- [May17] Andreas Mayer. Noisyopt: a Python library for optimizing noisy functions. *Journal of Open Source Software*, 2(13):258:1, May 2017. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00258>. [MBK09]
- [May21] Simon May. minimal-lagrangians: Generating and studying dark matter model Lagrangians with just the particle content. *Computer Physics Communications*, 261(?):Article 107773, April 2021. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465520303878>. [MBW07]
- Millman:2007:AFM**
K. Jarrod Millman and Matthew Brett. Analysis of functional magnetic resonance imaging in Python. *Computing in Science and Engineering*, 9(3):52–55, May/June 2007. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).
- Mahar:2017:PHP**
Sara Mahar and Matthew Bellis. *hmis*: a python tool to visualize and analyze HMIS data. *Journal of Open Source Software*, 2(18):384:1–384:2, October 2017. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00384>.
- Misra:2009:MCT**
Ananya Misra, Douglas Blank, and Deepak Kumar. A music context for teaching introductory computing. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 41(3):248–252, September 2009. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic). Proceedings of ITiCSE '09.
- Moore:2007:PPF**
Dana Moore, Raymond Budd, and William Wright. *Professional Python frameworks: Web 2.0 programming with Django and TurboGears*. Wrox professional guides. Wiley,

- New York, NY, USA, 2007. ISBN 0-470-13809-2 (paperback). xxvii + 420 pp. LCCN TK5105.888 .M663 2007. URL <http://www.loc.gov/catdir/enhancements/fy0741/2007032138-d.html>; <http://www.loc.gov/catdir/enhancements/fy0741/2007032138-t.html>; <http://www.loc.gov/catdir/enhancements/fy0804/2007032138-b.html>. [McG00]
- [McF16] Brian McFee. **McFee:2016:PRE** `resampy`: efficient sample rate conversion in Python. *Journal of Open Source Software*, 1(8):125:1, December 2016. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00125>.
- [McG98a] S. McGrath. **McGrath:1998:XPP** XML programming in Python. *Dr. Dobb's Journal of Software Tools*, 23(2):82-??, 84-87, 101-104, February 1998. CODEN DDJOEB. ISSN 1044-789X. [McG07a]
- [McG98b] Sean McGrath. **McGrath:1998:IPX** Internet programming: XML programming in Python. *Dr. Dobb's Journal of Software Tools*, 23(2): 82, 84-87, 101-104, February 1998. CODEN DDJOEB. ISSN 1044-789X. [McG07b]
- [McG98c] Sean McGrath. **McGrath:1998:PBT** Programmer's bookshelf: The Tcl/Tk and Python scripting environments. *Dr. Dobb's Journal of Software Tools*, 23(10): 143, 145, October 1998. CODEN DDJOEB. ISSN 1044-789X. URL http://www.ddj.com/ddj/1998/1998_10/index.htm. **McGrath:2000:XPP**
- Sean McGrath. *XML processing with Python*. The Charles F. Goldfarb series on open information management. Prentice-Hall, Englewood Cliffs, NJ 07632, USA, 2000. ISBN 0-13-021119-2. xxiv + 527 pp. LCCN QA76.76.H94 M3885 2000. US\$44.99. URL http://www.phptr.com/ptrbooks/ptr_0130211192.html. Includes CD-ROM. **McGugan:2007:BGD**
- Will McGugan. *Beginning game development with Python and Pygame: from novice to professional*. The expert's voice in open source. Apress, Berkeley, CA, USA, 2007. ISBN 1-59059-872-5. xxiii + 316 pp. LCCN ???? **McGuire:2007:GSP**
- Paul McGuire. *Getting started with pyparsing*. O'Reilly shortcuts. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2007. ISBN 0-596-51423-9. LCCN QA76.76.A65

- M33 2007eb; QA76.76.A65.
URL <http://www.oreilly.com/catalog/9780596514235>.
- Martin:2019:QPM**
- [MCGK19] R. D. Martin, Q. Cai, T. Garrow, and C. Kapahi. **QExpy**: a Python-3 module to support undergraduate physics laboratories. *SoftwareX*, 10(??):Article 100273, July/December 2019. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S235271101930144X>.
- McKinney:2012:PDA**
- [McK12] Wes McKinney. *Python for Data Analysis*. O’Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2012. ISBN 1-4493-1979-3 (paperback). 400 pp. LCCN ????? EUR 32.00; UK £30.99.
- McKinley:2016:PWU**
- [McK16] Kathryn S. McKinley. Programming the world of uncertain things (keynote). *ACM SIGPLAN Notices*, 51(1):1–2, January 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- Marr:2015:TVP**
- [MD15] Stefan Marr and Stéphane Ducasse. Tracing vs. partial evaluation: comparing meta-compilation approaches for self-optimizing interpreters. *ACM SIGPLAN Notices*, 50(10):821–839, October 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- Makowski:2017:PNP**
- [MD17] Dominique Makowski and Léo Dutriaux. **Neuropsychia.py**: a Python module for creating experiments, tasks and questionnaires. *Journal of Open Source Software*, 2(19):259:1–259:2, November 2017. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00259>.
- Melchert:2021:PPT**
- [MD21] Oliver Melchert and Ayhan Demircan. **pyGLLE**: a Python toolkit for solving the generalized Lugiato–Lefever equation. *SoftwareX*, 15(??):??, July 2021. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S235271102100073X>.
- Melchert:2022:PPF**
- [MD22] O. Melchert and A. Demircan. **py-fmas**: a Python package for ultrashort optical pulse propagation in terms of forward models for the analytic signal. *Computer Physics Communications*, 273(??):Article 108257, April 2022. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL

- <http://www.sciencedirect.com/science/article/pii/S0010465521003696>. [Mer03]
- Mehrotra:2018:OSR**
- [MDRN18] Pavan Mehrotra, Sabar Dasgupta, Samantha Robertson, and Paul Nuyujukian. An open-source realtime computational platform (short WIP paper). *ACM SIGPLAN Notices*, 53(6):109–112, June 2018. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- Mehta:2015:MPS**
- [Meh15] Hemant Kumar Mehta. *Mastering Python scientific computing: a complete guide for Python programmers to master scientific computing using Python APIs and tools*. Community experience distilled. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78328-883-3, 1-78328-882-5. ??? pp. LCCN QA76.73.P98. URL <http://proquest.safaribooksonline.com/?fpi=9781783288823>. [MGS07]
- Mentis:2009:RAD**
- [Men09] Alexander S. Mentis. A robotics API dialect for type-safe robots: translating Myro to Ada. *ACM SIGADA Ada Letters*, 29(3):91–102, December 2009. CODEN AALEE5. ISSN 1094-3641 (print), 1557-9476 (electronic).
- Mertz:2003:TPP**
- David Mertz. *Text processing in Python*. Addison-Wesley, Reading, MA, USA, 2003. ISBN 0-321-11254-7. xix + 520 pp. LCCN QA76.9.T48 M47 2003.
- Meng:2021:MPP**
- [MFQ⁺21] Siqin Meng, Zhendong Fu, Jianfei Qin, Xiaobai Ma, Yuqing Li, Lijie Hao, Yuntao Liu, Kai Sun, and Dongfeng Chen. *magcoilcalc: a Python package for modeling and optimization of axisymmetric magnet coils generating uniform magnetic field for noble gas spin-polarizers*. *SoftwareX*, 16(??): ??, December 2021. CODEN ????. ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021001060>.
- Myers:2007:PUS**
- Christopher R. Myers, Ryan N. Gutenkunst, and James P. Sethna. Python unleashed on systems biology. *Computing in Science and Engineering*, 9(3): 34–37, May/June 2007. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).
- Minichino:2015:LOC**
- [MH15] Joe Minichino and Joseph Howse. *Learning OpenCV 3 computer vision with Python: unleash the power of computer vision with Python us-*

- ing OpenCV*. Community experience distilled. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78528-977-2, 1-78528-384-7. LCCN TA1634. URL <http://proquest.safaribooksonline.com/?fpi=9781785283840>. [Mil18]
- Moore:2018:PSS**
- [MH18] Jason K. Moore and Mont Hubbard. `skijumpdesign`: A ski jump design tool for specified equivalent fall height. *Journal of Open Source Software*, 3(28):818:1–818:3, August 2018. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00818>. [Mir18]
- Miller:2014:MTP**
- [Mil14] Thomas Miller. *Modeling techniques in predictive analytics with Python and R: a guide to data science*. Pearson Education, Upper Saddle River, NJ, 2014. ISBN 0-13-389206-9 (hardcover), 0-13-389212-3. xviii + 418 pp. LCCN QA76.73.P98. [Mis19]
- Miller:2015:MDS**
- [Mil15] Thomas W. Miller. *Marketing data science: modeling techniques in predictive analytics with R and Python*. Pearson Education, Old Tappan, NJ, USA, 2015. ISBN 0-13-388766-9, 0-13-388762-6. ???? pp. LCCN HF5415. URL <http://proquest.safaribooksonline.com/?fpi=9780133887662>. [Mit00]
- Miller:2018:HDA**
- Curtis Miller. *Hands-On Data Analysis with NumPy and Pandas: Implement Python Packages from Data Manipulation to Processing*. Packt Publishing Ltd, Birmingham, 2018. ISBN 1-78953-424-0, 1-78953-079-2. 166 pp. LCCN ???? URL <http://public.eblib.com/choice/PublicFullRecord.aspx?p=5446042>.
- Miranda:2018:PPR**
- Lester James V. Miranda. `PySwarms`: a research toolkit for particle swarm optimization in Python. *Journal of Open Source Software*, 3(21):433:1–433:2, January 2018. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00433>.
- Mishra:2019:PRP**
- Pradeepta Mishra. *PyTorch Recipes: a Problem-solution Approach*. Apress, Berkeley, CA, USA, 2019. ISBN 1-4842-4257-2, 1-4842-4258-0 (e-book), 1-4842-4259-9. LCCN QA76.87. URL <http://www.vlebooks.com/vleweb/product/openreader?id=none\%26isbn=9781484242582>.
- Mitchell:2000:DAS**
- Scott Mitchell. *Designing Active Server Pages: Scott Mitchell's Guide to Writing Reusable Code*. O'Reilly &

- Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, September 2000. ISBN 0-596-00044-8. xii + 348 pp. LCCN TK5105.8885.A26 M58 2000. US\$29.95. URL <http://catdir.loc.gov/catdir/enhancements/fy0715/00062331-d.html>; <http://catdir.loc.gov/catdir/enhancements/fy0912/00062331-b.html>; <http://catdir.loc.gov/catdir/enhancements/fy1008/00062331-t.html>; <http://www.oreilly.com/catalog/9780596000448>; <http://www.oreilly.com/catalog/designasp>. [ML16a]
- Mitchell:2015:WSP**
- [Mit15] Ryan Mitchell. *Web scraping with Python: collecting data from the modern web*. O'Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol, CA 95472, USA, 2015. ISBN 1-4919-1029-1 (paperback), 1-4919-1028-3. xiii + 238 pp. LCCN QA76.73.P98. URL <http://proquest.safaribooksonline.com/9781491910283>.
- Mulansky:2016:PPP**
- [MK16] Mario Mulansky and Thomas Kreuz. PySpike — a Python library for analyzing spike train synchrony. *SoftwareX*, 5(??):178–182, ??? 2016. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711016300255>.
- Meller:2016:PDM**
- Yosef Meller and Alex Liberson. Particle data management software for 3D particle tracking velocimetry and related applications — the Flowtracks package. *Journal of Open Research Software*, 4(1):e23–??, June 16, 2016. CODEN ???? ISSN 2049-9647. URL <https://openresearchsoftware.metajnl.com/articles/10.5334/jors.101/>.
- Mortensen:2016:HPP**
- Mikael Mortensen and Hans Peter Langtangen. High performance Python for direct numerical simulations of turbulent flows. *Computer Physics Communications*, 203(??):53–65, June 2016. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465516300200>.
- Mukha:2018:EPP**
- Timofey Mukha and Mattias Liefvendahl. Eddylicious: a Python package for turbulent inflow generation. *SoftwareX*, 7(??):107–111, January/June 2018. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711018300255>.

com/science/article/pii/S2352711018300487.

Marques:2022:ISF

- [MLB22] Henrique Marques, Nuno Laranjeiro, and Jorge Bernardino. Injecting software faults in Python applications. *Empirical Software Engineering*, 27(1):??, January 2022. CODEN ESENFV. ISSN 1382-3256 (print), 1573-7616 (electronic). URL <https://link.springer.com/article/10.1007/s10664-021-10047-9>.

Malakhov:2018:CMT

- [MLGW18] Anton Malakhov, David Liu, Anton Gorshkov, and Terry Wilmarth. Composable multithreading and multi-processing for numeric libraries. In Fatih Akici, David Lippa, Dillon Niederhut, and M Pacer, editors, *Proceedings of the 17th Python in Science Conference, Austin, TX, 9–15 July 2018*, pages 15–21. ????, ????, 2018. URL http://conference.scipy.org/proceedings/scipy2018/anton_malakhov.html.

Maruch:2006:PD

- [MM06] Stef Maruch and Aahz Maruch. *Python for dummies*. Wiley, New York, NY, USA, 2006. ISBN 0-471-77864-8 (paperback). xx + 410 pp. LCCN QA76.73.P98 M374 2006. URL <http://www.loc.gov/catdir/enhancements/fy0741/2006924031-b.html>;

<http://www.loc.gov/catdir/enhancements/fy0741/2006924031-d.html>; <http://www.loc.gov/catdir/toc/fy0713/2006924031.html>.

Martelli:2005:PC

Alex Martelli, Anna Martelli Ravenscroft, and David Ascher, editors. *Python cookbook*. O’Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol, CA 95472, USA, second edition, 2005. ISBN 0-596-00797-3. xxxiii + 807 pp. LCCN QA76.73.P98 P983 2005.

Meinke:2008:SVS

- [MMEH08] Jan H. Meinke, Sandipan Mohanty, Frank Eisenmenger, and Ulrich H. E. Hansmann. SMMP v. 3.0 — simulating proteins and protein interactions in Python and Fortran. *Computer Physics Communications*, 178(6):459–470, March 15, 2008. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465507004614>.

Mieli:2019:NTP

- [MMG19] Davide Micieli, Triestino Miniti, and Giuseppe Gorini. NeuTomPy toolbox, a Python package for tomographic data processing and reconstruction. *SoftwareX*, 9(??):260–264, January/June 2019. CODEN ????. ISSN 2352-7110. URL

- <http://www.sciencedirect.com/science/article/pii/S2352711018302103>. [Moh15]
- [MMP11] Héctor Migallón, Violeta Migallón, and José Penadés. A Parallel Python library for nonlinear systems. *The Journal of Supercomputing*, 58(3): 438–448, December 2011. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic). URL <http://www.springerlink.com/openurl.asp?genre=article&issn=0920-8542&volume=58&issue=3&page=438>.
- [MMP11] Héctor Migallón, Violeta Migallón, and José Penadés. A Parallel Python library for nonlinear systems. *The Journal of Supercomputing*, 58(3): 438–448, December 2011. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic). URL <http://www.springerlink.com/openurl.asp?genre=article&issn=0920-8542&volume=58&issue=3&page=438>.
- [MMT09] Joaquim R. R. A. Martins, Christopher Marriage, and Nathan Tedford. pyMDO: an object-oriented framework for multidisciplinary design optimization. *ACM Transactions on Mathematical Software*, 36(4):20:1–20:25, August 2009. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). [Mor17]
- [MO14] Asif Mushtaq and Kåre Olaussen. Automatic code generator for higher order integrators. *Computer Physics Communications*, 185(5):1461–1472, May 2014. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465514000253>. [Mos20b]
- [Mohit:2015:PPT] Raj Mohit. *Python penetration testing essentials*. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78439-858-6, 1-78439-588-9 (e-book). LCCN QA76.73.P98.
- [Mooers:2021:PSL] B. H. M. Mooers. A PyMOL snippet library for Jupyter to boost researcher productivity. *Computing in Science and Engineering*, 23(2):47–53, March/April 2021. CODEN CSENEFA. ISSN 1521-9615 (print), 1558-366X (electronic).
- [Morgan:2017:PLP] Benjamin J. Morgan. `lattice_mc`: a Python lattice-gas Monte Carlo module. *Journal of Open Source Software*, 2(13):247:1–247:2, May 2017. CODEN JOST. ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00247>.
- [Moshiri:2020:TMS] N. Moshiri. TreeSwift: a massively scalable Python tree package. *SoftwareX*, 11(??):Article 100436, January/June 2020. CODEN JOST. ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711019300767>.
- [Mosteo:2020:RBA] Alejandro R. Mosteo. RCLAda: or bringing Ada to the Robot

- Operating System. *ACM SIGADA Ada Letters*, 39(2): 35–40, April 2020. CODEN AALEE5. ISSN 1094-3641 (print), 1557-9476 (electronic). URL <https://dl.acm.org/doi/10.1145/3394514.3394518>. [MR07]
- [MP19a] Brian A. Malloy and James F. Power. An empirical analysis of the transition from Python 2 to Python 3. *Empirical Software Engineering*, 24(2): 751–778, April 2019. CODEN ESENF7. ISSN 1382-3256 (print), 1573-7616 (electronic). URL <http://link.springer.com/article/10.1007/s10664-018-9637-2>. [MR09]
- [MP19b] Brian A. Malloy and James F. Power. Grammar engineering for multiple front-ends for Python. *Software—Practice and Experience*, 49(3): 380–400, March 2019. CODEN SPEXBL. ISSN 0038-0644 (print), 1097-024X (electronic). [MR18]
- [MPMC21] Carlos Melchor-Placencia and Christian Málaga-Chuquitaype. OpenMoist: a Python code for transient moisture transfer analysis. *SoftwareX*, 15(??):??, July 2021. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021000571>. [MRA06]
- Bradley N. Miller and David L. Ranum. *Computer science: the Python programming language*. Jones and Bartlett Publishers, Sudbury, MA, USA, 2007. ISBN 0-7637-4316-X. 59 pp. LCCN QA76.73.P98 M537 2007. **Miller:2007:CSP**
- Bradley N. Miller and David L. Ranum. *Python programming in context*. Jones and Bartlett Publishers, Sudbury, MA, USA, 2009. ISBN 0-7637-4602-9 (paperback). xxv + 492 pp. LCCN QA76.73.P98 M544 2009. **Miller:2009:PPC**
- David J. Mulryne and John W. Ronayne. PyTransport: a Python package for the calculation of inflationary correlation functions. *Journal of Open Source Software*, 3(23): 494:1–494:2, March 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00494>. **Mulryne:2018:PPP**
- Alex Martelli, Anna Martelli Ravensroft, and David Ascher. *Python par l'exemple*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2006. ISBN
- Martelli:2006:PPE**

2-84177-379-5. xxv + 525 pp. LCCN ????. French translation by Éric Jacoboni.

Meier:2017:PVM

- [MRG17] Remigius Meier, Armin Rigo, and Thomas R. Gross. Parallel virtual machines with RPython. *ACM SIGPLAN Notices*, 52(2):48–59, February 2017. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). [MS13]

Meier:2018:VMD

- [MRG18] Remigius Meier, Armin Rigo, and Thomas R. Gross. Virtual machine design for parallel dynamic programming languages. *Proceedings of the ACM on Programming Languages (PACMPL)*, 2(OOPSLA):109:1–109:25, October 2018. URL <https://dl.acm.org/doi/abs/10.1145/3276479>. [MS15]

Matthew:2000:PLP

- [MS+00] Neil Matthew, Richard Stones, et al. *Professional Linux programming*. Wrox Press, Chicago, IL, USA, 2000. ISBN 1-86100-301-3. xviii + 1155 pp. LCCN QA76.76.O63 P754 2000. [MSL+07]

Myers:2007:PEC

- [MS07] Christopher R. Myers and James P. Sethna. Python for education: Computational methods for nonlinear systems. *Computing in Science and Engineering*, 9(3):75–79, May/ [MSR03]

June 2007. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).

Mertz:2013:GIP

Andrew Mertz and William Slough. A gentle introduction to Python_{TEX}. *TUGboat*, 34(3):302–312, 2013. ISSN 0896-3207. URL <http://www.tug.org/TUGboat/tb34-3/tb108mertz.pdf>.

Malthe-Sorensen:2015:EMU

Anders Malthe-Sørensen. *Elementary mechanics using Python: a modern course combining analytical and numerical techniques*. Undergraduate lecture notes in physics. Springer, Cham, Switzerland, 2015. ISBN 3-319-19595-6 (print), 3-319-19596-4 (e-book). ISSN 2192-4791 (print), 2192-4805 (electronic). xiii + 590 pp. LCCN QA805 .M35 2015.

Mardal:2007:UPS

Kent-Andre Mardal, Ola Skavhaug, Glenn T. Lines, Gunnar A. Staff, and Åsmund Ødegård. Using Python to solve partial differential equations. *Computing in Science and Engineering*, 9(3):48–51, May/June 2007. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).

Miller:2003:OCP

W. W. Miller, C. Sontag, and

- J. F. Rose. OPUS: a CORBA pipeline for Java, Python, and Perl applications. *Astronomical Society of the Pacific Conference Series*, 295:261–264, 2003. CODEN ????? ISSN 1050-3390. [MT19]
- Moura:2019:UJP**
- [MSS⁺19] R. A. R. Moura, M. A. O. Schroeder, S. J. S. Silva, E. G. Nepomuceno, P. H. N. Vieira, and A. C. S. Lima. The usage of Julia programming in grounding grids simulations : An alternative to MATLAB and Python. In *2019 International Symposium on Lightning Protection (XV SIPDA)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.
- Mount:2008:PRF**
- [MSW08] Sarah Mount, James Shuttleworth, and Russel Winder. *Python for Rookies: a first course in programming*. Thomson Learning (EMEA), London, UK, 2008. ISBN 1-84480-701-0. xxi + 454 pp. LCCN QA76.73.P98 M68 2008.
- McNicholas:2018:DSJ**
- [MT18] Paul D. McNicholas and Peter A. Tait. *Data Science with Julia*. Taylor and Francis, CRC Press, Boca Raton, FL, USA, 2018. ISBN 1-138-49998-6 (paperback), 1-351-01364-5 (e-book: Mobipocket), 1-351-01365-3 (e-book), 1-351-01366-1 (e-book: PDF), 1-351-01367-X (e-book). 241 pp. LCCN QA76.73.J85 M37 2018.
- McNicholas:2019:DSJ**
- Paul D. McNicholas and Peter A. Tait. *Data science with Julia*. Chapman and Hall/CRC, Boca Raton, FL, USA, 2019. ISBN 1-138-49999-4, 1-351-01364-5, 1-351-01365-3, 1-351-01366-1, 1-351-01367-X. xix + 220 pp. LCCN QA76.73.J85 M37 2019eb.
- Meng:2018:MPP**
- [MTPHH18] Siqin Meng, Rasmus Toft-Petersen, Lijie Hao, and Klaus Habicht. `multiflexlib`: a Python package for data reduction and visualization for the cold-neutron multi energy wide angle analyzer MultiFLEXX. *SoftwareX*, 7(??):309–312, January/June 2018. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711018301055>.
- McCubbine:2018:GPC**
- [MTS⁺18] Jack McCubbine, Fabio Caratori Tontini, Vaughan Stagpoole, Euan Smith, and Grant O’Brien. `Gsolve`, a Python computer program with a graphical user interface to transform relative gravity survey measurements to absolute gravity values and gravity anomalies. *SoftwareX*, 7(??):122–128, January/June 2018. CODEN

- ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711018300566>.
- [Mue14] John Mueller. *Beginning programming with Python for dummies*. Wiley, New York, NY, USA, 2014. ISBN 1-118-89145-7 (paperback), 1-118-89147-3 (e-book), 1-118-89149-X (ePDF). xiv + 382 pp. LCCN QA76.73.P98 M839 2014. URL <http://www.dummies.com/how-to/content/beginning-python-for-dummies-cheat-sheet.html>; <http://www.loc.gov/catdir/enhancements/fy1513/2014935516-b.html>; <http://www.loc.gov/catdir/enhancements/fy1513/2014935516-t.html>. [MWM20]
- [Müll13] Daniel Müllner. *fastcluster*: Fast hierarchical, agglomerative clustering routines for R and Python. *Journal of Statistical Software*, 53(9):??, May 2013. CODEN JSSOBK. ISSN 1548-7660. URL <http://www.jstatsoft.org/v53/i09>.
- [Mur18] Steven G. Murray. *powerbox*: a Python package for creating structured fields with isotropic power spectra. *Journal of Open Source Software*, 3(28):850:1–850:2, August 2018. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00735>.
- [Ma:2020:PPP] He Ma, Wennie Wang, Siyoung Kim, Man-Hin Cheng, Marco Govoni, and Giulia Galli. Py-CDFT: a Python package for constrained density functional theory. *Journal of Computational Chemistry*, 41(20):1859–1867, July 30, 2020. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).
- [Mauro:2020:KTC] Yihong Z. Mauro, Collin J. Wilkinson, and John C. Mauro. KineticPy: a tool to calculate long-time kinetics in energy landscapes with broken ergodicity. *SoftwareX*, 11(??):Article 100393, January/June 2020. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711019303516>.
- [Mirzaev:2018:PEP] Inom Mirzaev, Drew F. K. Williamson, and Jacob G. Scott. *egtplot*: a Python package for three-strategy evolutionary games. *Journal of Open Source Software*, 3(26):735:1–735:4, June 2018. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00735>.
- [Mueller:2014:BPP] [MWK+20]
- [Mullner:2013:FFH]
- [Murray:2018:PPP]

- [Myr15] Nikolaos E. Myridis. *Image processing and acquisition using Python*, by Ravishankar Chityala and Sridevi Pudipeddi, Scope: textbook. Level: general readership, undergraduate, teacher. *Contemporary Physics*, 56(2):243, 2015. CODEN CTPHAF. ISSN 0010-7514 (print), 1366-5812 (electronic).
- [Nag06] William Nagel. Embedding Python in your C programs. *Linux journal*, 2006(142):8, February 2006. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).
- [Nag17] Sandeep Nagar. *Beginning Julia Programming: For Engineers and Scientists*. Apress, Berkeley, CA, USA, 2017. ISBN 1-4842-3170-8, 1-4842-3171-6. xxi + 351 + 20 + 18 pp. LCCN QA76.7-76.73; QA76.76.C65. URL <http://www.springerlink.com/content/978-1-4842-3171-5>.
- [Nai14] Vineeth G. Nair. *Getting Started with Beautiful Soup: build your own web scraper and learn all about web scraping with Beautiful Soup*. Packt Publishing, Birmingham, UK, 2014. ISBN 1-78328-956-2, 1-78328-955-4, 1-4619-5720-6 (e-book), 1-306-40146-1 (e-book). LCCN QA76.9.D343. URL <http://proquest.tech.safaribooksonline.de/9781783289554>.
- [NCS17] Kyle E. Niemeyer, Nicholas J. Curtis, and Chih-Jen Sung. pyJac: Analytical Jacobian generator for chemical kinetics. *Computer Physics Communications*, 215(??):188–203, June 2017. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465517300462>.
- [NEGZG18] Anwar O. Nunez-Elizalde, James S. Gao, Tianjiao Zhang, and Jack L. Gallant. cottoncandy: scientific python package for easy cloud storage. *Journal of Open Source Software*, 3(28):890:1–890:2, August 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00890>.
- [Nel15] Fabio Nelli. *Python data analytics: data analysis and science using Pandas, matplotlib, and the Python programming language*. The expert’s voice in Python. Apress, Berkeley, CA, USA, 2015. ISBN 1-4842-0959-1 (paperback), 1-4842-0958-3 (e-book). xxi + 337 pp. LCCN QA76.73.P98.

- [Ngy08a] **Nguyen:2008:IPCa** Binh Q. Nguyen. The implementation of a Python class for structuring network data collected in a test bed. Technical report D-arl-tr-4423, AD-a479 698, United States Army Research Lab, Adelphi, MD, USA, 2008. 30 pp.
- [Ngy08b] **Nguyen:2008:IPCb** Binh Q. Nguyen. An introduction to Python (a one-hour tour). Technical report AD-arl-tn-0328, AD-a484 316, United States Army Research Lab, Adelphi, MD, USA, 2008. 20 pp.
- [Ngy08c] **Nguyen:2008:PPE** Binh Q. Nguyen. pyGFC — a Python extension to the C++ Geodesy Foundation Classes. Technical report AD-arl-tr-4623, AD-a488 020, United States Army Research Lab, Adelphi, MD, USA, 2008.
- [Ngy08d] **Nguyen:2008:CSL** Quan Nguyen. *CAD scripting language: a collection of Perl, Ruby, Python, TCL and Skill scripts*. Ramacad, San Jose, CA, USA, 2008. ISBN 0-9777812-2-4. ??? pp. LCCN ???
- [Ngy08e] **Nguyen:2008:SLC** Quan Nguyen, editor. *Scripting languages: a collection of Perl, Ruby, Python, TCL and Unix*. Ramacad, San Jose, CA, USA, 2008. ISBN 0-9777812-3-2. ??? pp. LCCN ???
- [Nil07a] **Nilson:2007:PSC** Jon K. Nilson. Python in scientific computing: Applications to Bose–Einstein condensates. *Computer Physics Communications*, 177(1–2):45, July 2007. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465507001312>.
- [Nil07b] **Nilson:2007:MIQ** Jon Kristian Nilson. MontePython: Implementing quantum Monte Carlo using Python. *Computer Physics Communications*, 177(10):799–814, November 15, 2007. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465507003141>.
- [Nix15] **Nixon:2015:GSP** Dan Nixon. *Getting started with Python and Raspberry Pi*. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78355-159-3. ??? pp. LCCN ???
- [NMGB17] **Naecker:2017:PPP** Benjamin Naecker, Niru Maheswaranathan, Surya Ganguli, and Stephen Baccus. Pyret: a Python package for analysis of neurophysiology data. *Journal of Open*

- Source Software*, 2(9):137:1, January 2017. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00137>. [OC20]
- Nordh:2017:PPF**
- [Nor17] Jerker Nordh. `pyParticleEst`: a Python framework for particle-based estimation methods. *Journal of Statistical Software*, 78(??):??, ???? 2017. CODEN JSSOBK. ISSN 1548-7660. URL <https://www.jstatsoft.org/index.php/jss/article/view/v078i03>; <https://www.jstatsoft.org/index.php/jss/article/view/v078i03/v78i03.pdf>. [Och09]
- Omar:2017:PSF**
- [OA17] Cyrus Omar and Jonathan Aldrich. Programmable semantic fragments: the design and implementation of `typy`. *ACM SIGPLAN Notices*, 52(3):81–92, March 2017. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). [OE21]
- OConnor:2013:VPC**
- [O’C13] T. J. O’Connor. *Violent Python: a cookbook for hackers, forensic analysts, penetration testers and security engineers*. Syngress Publishing, Inc., Rockland, MA, USA, 2013. ISBN 1-59749-957-9 (paperback). xxv + 262 pp. LCCN QA76.73.P98 O26 2013.
- Ortner:2020:MFP**
- Michael Ortner and Lucas Gabriel Coliada Bandeira. `Magpylib`: a free Python package for magnetic field computation. *SoftwareX*, 11(??):Article 100466, January/June 2020. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020300170>.
- Ochem:2009:MLP**
- Quentin Ochem. Multi-language programming with Ada. *ACM SIGADA Ada Letters*, 29(3):19–20, December 2009. CODEN AALEE5. ISSN 1094-3641 (print), 1557-9476 (electronic).
- Ortin:2021:CPA**
- Francisco Ortin and Javier Escalada. `Cnerator`: a Python application for the controlled stochastic generation of standard C source code. *SoftwareX*, 15(??):??, July 2021. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S235271102100056X>.
- Otis:2017:PPC**
- [OL17] Richard Otis and Zi-Kui Liu. `picalphad`: CALPHAD-based computational thermodynamics in Python. *Journal of Open Research Software*, 5(1):1–??, January 09, 2017. CODEN ???? ISSN

- 2049-9647. URL <https://openresearchsoftware.metajnl.com/articles/10.5334/jors.140/>.
- Oliphant:2007:PSC**
- [Oli07] Travis E. Oliphant. Python for scientific computing. *Computing in Science and Engineering*, 9(3):10–20, May/June 2007. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).
- Orella:2021:HTA** [Orb18]
- [OLRLB21] Michael Julian Orella, McLain Evan Leonard, Yuriy Román-Leshkov, and Fikile Richard Brushett. High-throughput analysis of contact angle goniometry data using DropPy. *SoftwareX*, 14(??):??, June 2021. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021000108>.
- Ortin:2014:SDL** [Orl97]
- [OMGDG14] Francisco Ortin, Sheila Mendez, Vicente García-Díaz, and Miguel Garcia. On the suitability of dynamic languages for hot-reprogramming a robotics framework: a Python case study. *Software—Practice and Experience*, 44(1):77–104, January 2014. CODEN SPEXBL. ISSN 0038-0644 (print), 1097-024X (electronic).
- Oxvig:2014:PMP**
- [OPA+14] Christian Oxvig, Patrick Pedersen, Thomas Arildsen, Jan Østergaard, and Torben Larsen. Magni: a Python package for compressive sampling and reconstruction of atomic force microscopy images. *Journal of Open Research Software*, 2(1):e29–??, October 07, 2014. CODEN ????? ISSN 2049-9647. URL <https://openresearchsoftware.metajnl.com/articles/10.5334/jors.140/>.
- Orban:2018:BRI**
- Dominique Orban. Book review: *Introduction to Computation and Programming Using Python. Second Edition, with Application to Understanding Data*, by John V. Guttag. *SIAM Review*, 60(2):483–485, ??? 2018. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic).
- Orlowski:1997:NSC**
- A. Orlowski. And now for something completely different? [Python language]. *.EXE: the software developers' magazine*, 12(2):34–35, 37, 39, 41, July 1997. CODEN EXEEE5. ISSN 0268-6872.
- Orr:2005:RDP**
- [Orr05] Mike Orr. Review: *Dive into Python*. *Linux journal*, 2005(130):??, February 2005. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).
- Otoni:2018:HJP**
- [Ott18] Guilherme Otoni. HHVM JIT: a profile-guided, region-

- based compiler for PHP and hack. *ACM SIGPLAN Notices*, 53(4):151–165, April 2018. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). [Par11]
- Ostrouchov:2018:PPA**
- [OZW18] Christopher Ostrouchov, Yanwen Zhang, and William J. Weber. `pysrim`: Automation, analysis, and plotting of SRIM calculations. *Journal of Open Source Software*, 3(28):829:1–829:3, August 2018. CODEN ????. ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00829>. [Pat16]
- Pierce:1997:AEU**
- [PAB⁺97] J. S. Pierce, S. Audia, T. Burnette, K. Christiansen, D. Cosgrove, M. Conway, K. Hinckley, K. Monkaitis, J. Paten, J. Shothet, D. Staack, B. Stearns, Sturgill, C., G. Williams, and R. Pausch. Alice: easy to use interactive 3D graphics. In ACM [ACM97], pages 77–78. ISBN 0-89791-881-9. LCCN ????. [Pay11]
- Palach:2014:PPP**
- [Pal14] Jan Palach. *Parallel programming with Python develop efficient parallel systems using the robust Python environment*. Community experience distilled. Packt Publishing, Birmingham, UK, 2014. ISBN 1-78328-839-6, 1-78328-840-X (e-book). LCCN QA76.642.
- URL <http://proquest.tech.safaribooksonline.de/9781783288397>. [Parkin:2011:DEL]
- Tom Parkin. Debugging embedded Linux platforms with DGB and Python. *Linux journal*, 2011(206):2:1–2:??, June 2011. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).
- Pataky:2016:RSO**
- Todd C. Pataky. `rft1d`: Smooth one-dimensional random field upcrossing probabilities in Python. *Journal of Statistical Software*, 71(??):??, ????? 2016. CODEN JSSOBK. ISSN 1548-7660. URL <https://www.jstatsoft.org/index.php/jss/article/view/v071i07>; <https://www.jstatsoft.org/index.php/jss/article/view/v071i07/v71i07.pdf>.
- Payne:2011:BPU**
- James Payne. *Beginning Python: using Python 2.6 and Python 3.1*. Wrox programmer to programmer. Wiley, New York, NY, USA, 2011. ISBN 0-470-41463-4. xxxiv + 588 pp. LCCN ????.
- Pradal:2009:PPB**
- [PBN⁺09] C. Pradal, F. Boudon, C. Nouguiér, J. Chopard, and C. Godin. PlantGL: a Python-based geometric library for 3D plant modelling at different scales. *Graphical models*, 71(1):1–

21, January 2009. CODEN GRMOFM. ISSN 1524-0703 (print), 1524-0711 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S1524070308000143>. [Pet02]

Pelletier:2001:Z

[Pel01] Michel Pelletier. Zope, 2001. URL <http://db.usenix.org/publications/library/proceedings/lisa2001/tech/>. Unpublished invited talk, LISA 2001: 15th Systems Administration Conference, December 2–7, 2001, Town and Country Resort Hotel, San Diego, CA. [PFH+16]

Percival:2014:TDD

[Per14a] Harry Percival. *Test-driven development with Python*. O’Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol, CA 95472, USA, 2014. ISBN 1-4493-6482-9 (paperback). xxviii + 449 pp. LCCN QA76.73.P98 P46 2014. [PG07]

Perkins:2014:PTP

[Per14b] Jacob Perkins. *Python 3 text processing with NLTK 3 cookbook: over 80 practical recipes on natural language processing techniques using Python’s NLTK 3.0*. Packt Publishing, Birmingham, UK, second edition, 2014. ISBN 1-78216-785-4, 1-78216-786-2 (e-book). iii + 288 pp. LCCN QA76.73.P98 P43 2014. [PGH11]

Petrone:2002:DPP

Jason Petrone. 3-D programming with Python. *Linux journal*, 94:89–94, February 2002. CODEN LJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).

Pape:2016:LIS

Tobias Pape, Tim Felgentreff, Robert Hirschfeld, Anton Gulenko, and Carl Friedrich Bolz. Language-independent storage strategies for tracing JIT-based virtual machines. *ACM SIGPLAN Notices*, 51(2):104–113, February 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Perez:2007:ISI

Fernando Pérez and Brian E. Granger. IPython: a system for interactive scientific computing. *Computing in Science and Engineering*, 9(3):21–29, May/June 2007. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).

Perez:2011:PES

Fernando Perez, Brian E. Granger, and John D. Hunter. Python: an ecosystem for scientific computing. *Computing in Science and Engineering*, 13(2):13–21, March/April 2011. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).

- [PHF10] **Patil:2010:PBS**
Anand Patil, David Huard, and Christopher J. Fonnesbeck. PyMC: Bayesian stochastic modelling in Python. *Journal of Statistical Software*, 35 (4):??, July 2010. CODEN JSSOBK. ISSN 1548-7660. URL <http://www.jstatsoft.org/v35/i04>.
- [PHH⁺12] **Pool:2012:SNU**
René Pool, Jaap Heringa, Martin Hoefling, Roland Schulz, Jeremy C. Smith, and K. Anton Feenstra. Software news and updates: Enabling grand-canonical Monte Carlo: Extending the flexibility of GROMACS through the GromPy Python interface module. *Journal of Computational Chemistry*, 33(12): 1207–1214, May 5, 2012. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).
- [Phi10] **Phillips:2010:POO**
Dusty Phillips. *Python 3 object oriented programming*. Packt Publishing, Birmingham, UK, 2010. ISBN 1-84951-126-8, 1-84951-127-6 (e-book). v + 388 pp. LCCN QA76.73.P98 P45 2010eb.
- [Phi15] **Phillips:2015:POO**
Dusty Phillips. *Python 3 object-oriented programming: unleash the power of Python 3 objects*. Packt Publishing, Birmingham, UK, second edition, 2015. ISBN 1-78439-878-0, 1-78439-878-0. xii + 431 pp. LCCN QA76.73.P98.
- [Pil04] **Pilgrim:2004:DP**
Mark Pilgrim. *Dive into Python*. The expert’s voice in open source. Apress, Berkeley, CA, USA, 2004. ISBN 1-59059-356-1 (paperback). xviii + 413 pp. LCCN QA76.73.P98 P55 2004.
- [Pil09] **Pilgrim:2009:DP**
Mark Pilgrim. *Dive into Python 3*. The expert’s voice in open source. Apress, Berkeley, CA, USA, 2009. ISBN 1-4302-2415-0. xlix + 360 pp. LCCN QA76.73.P98 P57 2009. URL <http://www.loc.gov/catdir/enhancements/fy1502/2011377607-b.html>; <http://www.loc.gov/catdir/enhancements/fy1502/2011377607-d.html>; <http://www.loc.gov/catdir/enhancements/fy1502/2011377607-t.html>.
- [Pip15] **Pippi:2015:PGA**
Massimiliano Pippi. *Python for Google App Engine: master the full range of development features provided by Google App Engine to build and run scalable web applications in Python*. Community Experience Distilled. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78439-819-5 (paperback), 1-78439-237-5 (e-book). 198 (est)

- pp. LCCN TK5105.8885.G643 .P577 2015.
- [Pit18] Matthew Pitkin. **Pitkin:2018:PPP** `psrqpy`: a python interface for querying the ATNF pulsar catalogue. *Journal of Open Source Software*, 3(22):538:1–538:2, February 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00538>.
- [Ple02] Alexander Pletzer. Python and finite elements. *Dr. Dobb's Journal of Software Tools*, 27(3):36, 38–40, March 2002. CODEN DDJOEB. ISSN 1044-789X. URL http://www.ddj.com/ftp/2002/2002_03/ellipt2d.txt; http://www.ddj.com/ftp/2002/2002_03/ellipt2d.zip. See correction [Ano02].
- [Plo97] R. Plosch. Design by contract for Python. In IEEE [IEE97b], pages 213–219. ISBN 0-8186-8271-X. LCCN QA76.758.A77 1997. IEEE catalog number 97TB100207. IEEE Computer Society order number PR08271.
- [PMBF17] João Felipe Pimentel, Leonardo Murta, Vanessa Braganholo, and Juliana Freire. **Pimentel:2017:NTC** `noWorkflow`: a tool for collecting, analyzing, and managing provenance from Python scripts.
- [PMM+13] Joe Gibbs Politz, Alejandro Martinez, Matthew Milano, Sumner Warren, Daniel Patterson, Junsong Li, Anand Chitipothu, and Shriram Krishnamurthi. Python: the full monty. *ACM SIGPLAN Notices*, 48(10):217–232, October 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). OOPSLA '13 conference proceedings.
- [Poo16] Geoffrey Poore. **Poore:2016:API** Advances in Python_{TeX} with an introduction to `fvextra`. *TUGboat*, 37(2):187–192, 2016. ISSN 0896-3207.
- [Pop10] Justin Pop. Experience report: Haskell as a reagent: results and observations on the use of Haskell in a Python project. *ACM SIGPLAN Notices*, 45(9):369–374, September 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- [Por03] Brett Porter. **Porter:2003:MDX** Managing devices with XML-RPC. *Dr. Dobb's Journal of Software*
- Politz:2013:PFM**

- Tools*, 28(4):66, 68–70, April 2003. CODEN DDJOEB. ISSN 1044-789X. URL <http://www.ddj.com/documents/s=7827/ddj0304h/>. [PRH17]
- Pedroni:2002:JE**
- [PR02] Samuele Pedroni and Noel Rappin. *Jython Essentials*. O’Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2002. ISBN 0-596-00247-5. xx + 277 pp. LCCN QA76.73.J38 P43 2002 Stacks. US\$24.95. URL <http://www.oreilly.com/catalog/jythoness>.
- Prechelt:2000:ECS**
- [Pre00] Lutz Prechelt. An empirical comparison of seven programming languages. *Computer*, 33(10):23–29, October 2000. CODEN CP-TRB4. ISSN 0018-9162 (print), 1558-0814 (electronic). URL <http://dlib.computer.org/co/books/co2000/pdf/rx023.pdf>; <http://www.computer.org/computer/co2000/rx023abs.htm>. [Pul00]
- Prechelt:2003:SLG**
- [Pre03] L. Prechelt. Are scripting languages any good? A validation of Perl, Python, Rexx, and Tcl against C, C++, and Java. *Advances in Computers*, 57:207–271, 2003. CODEN ???? ISSN 0065-2458. [PW17]
- Polimis:2017:CIR**
- Kivan Polimis, Ariel Rokem, and Bryna Hazelton. Confidence intervals for random forests in Python. *Journal of Open Source Software*, 2(19):124:1–124:4, November 2017. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00124>.
- Prasanna:2021:DOS**
- [PSGL21] Krishnamohan G. Prasanna, Rahul Sunil, Kapil Gupta, and Seung-Cheol Lee. DJMol: an open-source modeling platform for computational chemistry and materials science with a Python interpreter. *Journal of Computational Chemistry*, 42(29):2116–2129, November 5, 2021. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).
- Pulleyn:2000:EPM**
- Ivan Pulleyn. Embedding Python in multi-threaded C/C++ applications. *Linux journal*, 73:??, May 2000. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).
- Price-Whelan:2017:PGP**
- Adrian M. Price-Whelan. *Gala*: a Python package for galactic dynamics. *Journal of Open Source Software*, 2(18):388:1–388:2, October 2017. CODEN ???? ISSN 2475-9066. URL <http://>

- joss.theoj.org/papers/10.21105/joss.00388.
- [PWFM17] Adrian M. Price-Whelan and Daniel Foreman-Mackey. **schwimmbad**: a uniform interface to parallel processing pools in Python. *Journal of Open Source Software*, 2(17):357:1–357:2, September 2017. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00357>.
- [QZWU19] Tian Qin, Qi Zhang, Renata M. Wentzcovitch, and Koichiro Umemoto. **qha**: a Python package for quasiharmonic free energy calculation for multi-configuration systems. *Computer Physics Communications*, 237(??):199–207, April 2019. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465518303953>.
- [Rad06] Atanas Radenski. “Python first”: a lab-based digital introduction to computer science. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 38(3):197–201, September 2006. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic).
- [Rad08] Atanas Radenski. Digital CS1 study pack based on Moodle and Python. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 40(3):325, September 2008. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic). Proceedings of ITiCSE '08.
- [RAH+01] Bruce Richardson, Anonymous, Nathan Hokanson, Ken O. Burtch, Jim V., Jerel Crosland, Paul Taylor, Sheldon Dubrowin, Paul Dale Roberts, Dean Provins, Kathy Lynn, and Andre Lessa. Letters to the editor: Offended; A real bastard; common misconception; Ada boy!; wacky names; penultimate Linux box?; SuSe too loosa; LJ interactive; sold on *Soldier*; **groff** is great; what’s up with Ogg?; changes to the *Python Developer’s Handbook*. *Linux journal*, 83:6, 141–142, March 2001. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).
- [Ram15] Luciano Ramalho. *Fluent Python: clear, concise, and effective programming*. O’Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2015. ISBN

- 1-4919-4600-8 (paperback), 1-4919-4623-7, 1-4919-4625-3 (e-book), 1-4919-4626-1 (e-book). [Ras20] xxiv + 743 pp. LCCN AA76.73.P98. URL <http://proquest.safaribooksonline.com/?fpi=9781491946237>.
- [Ram18a] **Ramachandran:2018:APB**
Prabhu Ramachandran. automan: a Python-based automation framework for numerical computing. *Computing in Science and Engineering*, 20(5):81–97, September/October 2018. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic). URL <https://www.computer.org/csdl/mags/cs/2018/05/mcs2018050081-abs.html>.
- [Ram18b] **Ramalho:2018:PVG**
Luciano Ramalho. *Python vs. Go*. O’Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol, CA 95472, USA, 2018. ISBN 1-4920-3317-0, 1-4920-3318-9. ???? pp. LCCN QA76.73.P98.
- [Ras18] **Raschka:2018:PMP**
Sebastian Raschka. MLxtend: Providing machine learning and data science utilities and extensions to Python’s scientific computing stack. *Journal of Open Source Software*, 3(24):638:1–638:2, April 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00638>.
- Rasmussen:2020:PLR**
Leandro Lima Rasmussen. *UnBlocks^{gen}*: a Python library for 3D rock mass generation and analysis. *SoftwareX*, 12(??):Article 100577, July/December 2020. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020302909>.
- Raymond:1998:SPO**
Eric Raymond. Stop the presses: Open source summit. *Linux journal*, 50:??, 1998. CODEN LJJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic). URL <http://www.ssc.com/lj/issue50/2918.html>. Discusses Perl, Python, and Tcl.
- [RBP+21] **Ramachandran:2021:PPB**
Prabhu Ramachandran, Aditya Bhosale, Kunal Puri, Pawan Negi, Abhinav Muta, A. Dinesh, Dileep Menon, Rahul Govind, Suraj Sanka, Amal S. Sebastian, Ananyo Sen, Rohan Kaushik, Anshuman Kumar, Vikas Kurapati, Mrinalgouda Patil, Deep Tavker, Pankaj Pandey, Chandrashekhar Kaushik, Arkopal Dutt, and Arpit Agarwal. PySPH: a Python-based framework for smoothed particle hydrodynamics. *ACM Transactions on Mathematical Software*, 47(4):34:1–34:38, December 2021. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

- URL <https://dl.acm.org/doi/10.1145/3460773>.
- [RBV16] Veselin Raychev, Pavol Bielik, and Martin Vechev. Probabilistic model for code with decision trees. *ACM SIGPLAN Notices*, 51(10):731–747, October 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- [RC18] Lionel Roubeyrie and Sébastien Celles. Windrose: a Python Matplotlib, Numpy library to manage wind and pollution data, draw windrose. *Journal of Open Source Software*, 3(29):268:1–268:5, September 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00268>.
- [RCAE⁺20] Cristian Ramon-Cortes, Ramon Amela, Jorge Ejarque, Philippe Clauss, and Rosa M. Badia. AutoParallel: Automatic parallelisation and distributed execution of affine loop nests in Python. *The International Journal of High Performance Computing Applications*, 34(6):659–675, November 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL <https://journals.sagepub.com/doi/full/10.1177/1094342020937050>.
- [RDS07] Mark Ramm, Kevin Dangoor, and Gigi Sayfan. *Rapid Web applications with TurboGears: using Python to create Ajax-powered sites*. Prentice Hall open source software development series. Prentice-Hall, Englewood Cliffs, NJ 07632, USA, 2007. ISBN 0-13-243388-5 (paperback). xxvii + 472 pp. LCCN TK5105.888 .R355 2007.
- [Ree04] David Reed. Rapid application development with Python and Glade. *Linux journal*, 2004(123):??, July 2004. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).
- [Rem01a] Boudewijn Rempt. Python’s PyQt toolkit. *Dr. Dobbs’ Journal of Software Tools*, 26(1):88,
- [RCRS06] Christopher D. Rickett, Sung-Eun Choi, Craig E. Rasmussen, and Matthew J. Sotile. Rapid prototyping frameworks for developing scientific applications: a case study. *The Journal of Supercomputing*, 36(2):123–134, May 2006. CODEN JOSUED. ISSN 0920-8542 (print), 1573-0484 (electronic). URL <http://www.springerlink.com/openurl.asp?genre=article&iissn=0920-8542&volume=36&issue=2&spage=123>.
- [Rickett:2006:RPF]
- [Raychev:2016:PMC]
- [Ramm:2007:RWA]
- [Reed:2004:RAD]
- [Rempt:2001:PPT]

90, 92, 94, January 2001. CODEN DDJOEB. ISSN 1044-789X. URL http://www.ddj.com/ftp/2001/2001_01/pyqt.txt.

Rempt:2001:SJP

[Rem01b]

Boudewijn Rempt. Scripting with Java and Python: Building a Python console window in a Java application. *Dr. Dobb's Journal of Software Tools*, 26(10):56, 60–61, October 2001. CODEN DDJOEB. ISSN 1044-789X. URL http://www.ddj.com/ftp/2001/2001_10/pyconsol.txt; http://www.ddj.com/ftp/2001/2001_10/pyconsol.zip. [RG14]

Ren:2016:JTS

[RF16]

Brianna M. Ren and Jeffrey S. Foster. Just-in-time static type checking for dynamic languages. *ACM SIGPLAN Notices*, 51(6):462–476, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).

Ramu:2000:CCP

[RG00]

Chenna Ramu and Christina Gemuend. cgimodel: CGI programming made easy with Python. *Linux journal*, 75:??, July 2000. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic). [RG18]

Rhodes:2010:FPN

[RG10]

Brandon Rhodes and John Goerzen. *Foundations of Python*

network programming: the comprehensive guide to building network applications with Python. The expert's voice in open source. Apress, Berkeley, CA, USA, second edition, 2010. ISBN 1-4302-3003-7 (paperback), 1-4302-3004-5 (e-book). xx + 345 pp. LCCN QA76.73.P98 G64 2010eb. URL <http://proquest.safaribooksonline.com/9781430230038>.

Rhodes:2014:FPN

Brandon Rhodes and John Goerzen. *Foundations of Python network programming*. Apress, Berkeley, CA, USA, third edition, 2014. ISBN 1-4302-5854-3 (paperback), 1-4302-5855-1 (e-book). xxi + 388 pp. LCCN QA76.73.P98 R48 2014. URL <http://www.loc.gov/catdir/enhancements/fy1603/2015458068-b.html>; <http://www.loc.gov/catdir/enhancements/fy1603/2015458068-d.html>; <http://www.loc.gov/catdir/enhancements/fy1603/2015458068-t.html>.

Ramasubramani:2018:PRP

Vyas Ramasubramani and Sharon C. Glotzer. rowan: a Python package for working with quaternions. *Journal of Open Source Software*, 3(27):787:1–787:3, July 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00787>.

- [RG20] **Reizenstein:2020:AIL**
 Jeremy F. Reizenstein and Benjamin Graham. Algorithm 1004: The Iisignature library: Efficient calculation of iterated-integral signatures and log signatures. *ACM Transactions on Mathematical Software*, 46(1):8:1–8:21, March 2020. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3371237>.
- [RGS⁺21] **Richardson:2021:TLP**
 A. S. Richardson, D. F. Gordon, S. B. Swanekamp, I. M. Rittersdorf, P. E. Adamson, O. S. Grannis, G. T. Morgan, A. Ostefeld, K. L. Philips, C. G. Sun, G. Tang, and D. J. Watkins. TurboPy: a lightweight Python framework for computational physics. *Computer Physics Communications*, 258(??):Article 107607, January 2021. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465520302897>.
- [RH15] **RodasdePaz:2015:PGP**
 Alejandro Rodas de Paz and Joseph Howse. *Python game programming by example: a pragmatic guide for developing your own games with Python*. Community experience distilled. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78528-153-4, 1-78528-391-X (e-book). 230 (est.) pp. LCCN QA76.76.C672. URL <http://proquest.safaribooksonline.com/?fpi=9781785281532>.
- [RHM⁺17] **Rathgeber:2017:FAF**
 Florian Rathgeber, David A. Ham, Lawrence Mitchell, Michael Lange, Fabio Luporini, Andrew T. T. Mcrae, Gheorghe-Teodor Bercea, Graham R. Markall, and Paul H. J. Kelly. Firedrake: Automating the finite element method by composing abstractions. *ACM Transactions on Mathematical Software*, 43(3):24:1–24:??, January 2017. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL <https://dl.acm.org/citation.cfm?id=2998441>.
- [Ric13] **Richardson:2013:GSB**
 Matt Richardson. *Getting started with BeagleBone*. Maker Media, Sebastopol, CA, 2013. ISBN 1-4493-4537-9 (paperback), 1-4493-4536-0, 1-4493-4535-2 (e-book), 1-4493-4533-6 (e-book). xiii + 126 pp. LCCN TK7895.E42 R43 2013.
- [Ric14] **Richardson:2014:BEL**
 Matt Richardson. *BeagleBone für Einsteiger: [Linux-basierte Elektronik-Projekte mit Python und JavaScript]*. O’Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel:

- +1 617 354 5800, 2014. ISBN 3-95561-409-3. xii + 134 pp. LCCN ????
- [Ric15] **Richardson:2015:AP**
Craig Richardson. *Adventures in Python*. Wiley, New York, NY, USA, 2015. ISBN 1-118-95185-9, 1-118-95179-4. 282 pp. LCCN QA76.73.P98.
- [Rie09] **Riehl:2009:LEO**
Jonathan Riehl. Language embedding and optimization in Mython. *ACM SIGPLAN Notices*, 44(12):39–48, December 2009. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- [RKR21] **Ryan-Keogh:2021:PPU**
Thomas J. Ryan-Keogh and Charlotte M. Robinson. Phytoplankton photophysiology utilities: a Python toolbox for the standardization of processing active chlorophyll-a fluorescence data. *Frontiers in Marine Science*, 8, July 2021. ISSN 2296-7745.
- [RJKVL14] **Ragan-Kelley:2014:OPP**
Benjamin Ragan-Kelley, John P. Verboncoeur, and Ming-Chieh Lin. Optimizing physical parameters in 1-D particle-in-cell simulations with Python. *Computer Physics Communications*, 185(10):2487–2494, October 2014. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465514001994>.
- [RJAL09] **Ravitch:2009:AGL**
Tristan Ravitch, Steve Jackson, Eric Aderhold, and Ben Liblit. Automatic generation of library bindings using static analysis. *ACM SIGPLAN Notices*, 44(6):352–362, June 2009. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- [RM19] **Rao:2019:NLP**
Delip Rao and Brian McMahan. *Natural Language Processing with PyTorch: Build Intelligent Language Applications Using Deep Learning*. O’Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol, CA 95472, USA, 2019. ISBN 1-4919-7818-X, 1-4919-7820-1 (e-book), 1-4919-7822-8, 1-4919-7823-6 (paperback). xiii + 238 pp. LCCN QA76.9.N38 R36 2019.
- [RK19] **Rose:2019:PSB**
Michael E. Rose and John R. Kitchin. `pybliometrics`: Scriptable bibliometrics using a Python interface to Scopus. *SoftwareX*, 10(??):Article 100263, July/December 2019. CODEN ????. ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711019300573>.
- [RMZG06] **Ranum:2006:SAT**
David Ranum, Bradley Miller,

- John Zelle, and Mark Guzdial. Successful approaches to teaching introductory computer science courses with Python. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 38(1):396–397, March 2006. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic). [Roh16]
- [RNR17] D. Ranathunga, H. Nguyen, and M. Roughan. **MGtoolkit**: a Python package for implementing metagraphs. *SoftwareX*, 6(??):85–90, ????. 2017. CODEN ????. ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711017300080>. **Ranathunga:2017:MPP**
- [RO15a] Sebastian Raschka and Randal S. Olson. *Python machine learning: unlock deeper insights into machine learning with this vital guide to cutting-edge predictive analytics*. Community experience distilled. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78355-514-9, 1-78355-513-0. ????. pp. LCCN QA76.73.P98. URL <http://proquest.safaribooksonline.com/?fpi=9781783555130>. [Roo97]
- [RO15b] Jose Manuel Redondo and Francisco Ortin. A comprehensive evaluation of common Python implementations. *IEEE Software*, 32(4):76–84, July/August 2015. CODEN IESOEG. ISSN 0740-7459 (print), 1937-4194 (electronic). URL <http://www.computer.org/csdl/mags/so/2015/04/mso2015040076-abs.html>. **Rohit:2016:JC**
- Jalem Raj Rohit. *Julia Cookbook*. Packt Publishing, Birmingham, UK, 2016. ISBN 1-78588-201-5, 1-78588-363-1 (e-book). v + 157 pp. LCCN QA76.73.J8; T55.4-60.8. URL <http://sbiproxy.uqac.ca/login?url=https://international.scholarvox.com/book/88843406>. **Romero:2014:MPR**
- [Rom14] Victor Romero. *Mastering Python regular expressions*. Shroff Publishers, ????, 2014. ISBN 93-5110-550-4. LCCN ????. **Rook:1997:LCC**
- [Roo97] David Rook. A language collector comments on: Java, Perl & Python, October 1997. URL http://www.chips.navy.mil/chips/archives/97_oct/file12.htm. **Rooker:1998:BRP**
- [Roo98] Terry Rooker. Book review: *Programming Python. ;login: the USENIX Association newsletter*, 23(2): ??, April 1998. CODEN LOGNEM. ISSN 1044-6397. URL <http://www>.

usenix.org/publications/
login/1998-4/python.html.

Rosenberg:2008:DCT

- [Ros08] Scott Rosenberg. *Dreaming in code: Two dozen Programmers, three years, 4,732 bugs, and one quest for transcendent software*. Three Rivers Press, New York, NY, USA, 2008. ISBN ????. 403 pp. LCCN ????

Rossant:2013:LII

- [Ros13] Cyrille Rossant. *Learning IPython for interactive computing and data visualization: Learn IPython for interactive Python programming, high-performance numerical computing, and data visualization*. Open source: community experience distilled. Packt Publishing, Birmingham, UK, 2013. ISBN 1-78216-993-8 (paperback), 1-78216-994-6 (e-book), 1-299-54508-4 (e-book). iv + 123 pp. LCCN QA76.73.P98 .R677 2013.

Rossant:2014:IIC

- [Ros14] Cyrille Rossant. *IPython interactive computing and visualization cookbook: over 100 hands-on recipes to sharpen your skills in high-performance numerical computing and data science with Python*. Packt Publishing, Birmingham, UK, 2014. ISBN 1-78328-481-1, 1-78328-482-X (e-book), 1-322-16622-6 (e-book). v + 494 pp. LCCN QA76.73.P98 R677 2014.

Rose:2018:PCP

- [Ros18] Brian E. J. Rose. CLIMLAB: a Python toolkit for interactive, process-oriented climate modeling. *Journal of Open Source Software*, 3(24):659:1–659:2, April 2018. CODEN ????. ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00659>.

Ruiz-Rosero:2019:SSS

- [RRRGVD19] Juan Ruiz-Rosero, Gustavo Ramirez-Gonzalez, and Jesus Viveros-Delgado. Software survey: ScientoPy, a scientometric tool for topics trend analysis in scientific publications. *Scientometrics*, 121(2):1165–1188, November 2019. CODEN SCNTDX. ISSN 0138-9130 (print), 1588-2861 (electronic). URL <http://link.springer.com/article/10.1007/s11192-019-03213-w>.

Raamana:2017:PPC

- [RS17] Pradeep Reddy Raamana and Stephen C. Strother. Python class defining a machine learning dataset ensuring key-based correspondence and maintaining integrity. *Journal of Open Source Software*, 2(17):382:1, September 2017. CODEN ????. ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00382>.

Robertson:2021:AEP

- [RSPJ21] E. J. Robertson, N. Sibalić, R. M. Potvliege, and M. P. A. Jones. ARC 3.0: an expanded

- Python toolbox for atomic physics calculations. *Computer Physics Communications*, 261(??):Article 107814, April 2021. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465520304136>. [RZ09]
- [RSRT19] Samuel Rogers, Joshua Slycord, Ronak Raheja, and Hamed Tabkhi. Scalable LLVM-based accelerator modeling in gem5. *IEEE Computer Architecture Letters*, 18(1):18–21, January/June 2019. CODEN ????? ISSN 1556-6056 (print), 1556-6064 (electronic). [Rogers:2019:SLB]
- [Rus14] Matthew A. Russell. *Mining the social web*. O’Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, second edition, 2014. ISBN 1-4493-6761-5 (paperback), 1-4493-7045-4 (e-book), 1-4493-6821-2 (e-book), 1-4493-6822-0 (e-book). xxiv + 421 pp. LCCN QA76.9.D343 R87 2013. [Russell:2014:MSW]
- [RV20] Matteo Ravasi and Ivan Vascancelos. PyLops — a linear-operator Python library for scalable algebra and optimization. *SoftwareX*, 11(??):Article 100361, January/June 2020. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711019301086>. [Reed:2009:DSA]
- David M. Reed and John M. Zelle. *Data structures and algorithms using Python and C++*. Franklin, Beedle and Associates, Inc., Wilsonville, OR, USA, 2009. ISBN 1-59028-233-7. ????? pp. LCCN QA76.73.P98 R44 2009. [Reed:2009:DSA]
- [SAA18] D. J. Silva, J. S. Amaral, and V. S. Amaral. Heatrapy: a flexible Python framework for computing dynamic heat transfer processes involving caloric effects in 1.5D systems. *SoftwareX*, 7(??):373–382, January/June 2018. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711018301298>. [Silva:2018:HFP]
- [SABEh20] Ahmed Sleem, Mohamed Abdel-Baset, and Ibrahim El-henawy. PyIVNS: a Python based tool for interval-valued neutrosophic operations and normalization. *SoftwareX*, 12(??):Article 100632, July/December 2020. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020303459>. [Sleem:2020:PPB]
- [Ravasi:2020:PLO] Matteo Ravasi and Ivan Vascancelos. PyLops — a linear-operator Python library for scalable algebra and optimization. *SoftwareX*, 12(??):Article 100632, July/December 2020. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020303459>.

- [Saha12] Amit Saha. Parallel programming in C and Python. *Linux journal*, 2012(217):4:1–4:??, May 2012. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).
- [Saha15] Amit Saha. *Doing math with Python: use programming to explore algebra, statistics, calculus, and more!* No Starch Press, San Francisco, CA, USA, 2015. ISBN 1-59327-640-0 (paperback). xvii + 244 pp. LCCN QA20.C65 S24 2015.
- [Sal14] David Sale. *Testing Python: applying unit testing, TDD, BDD, and acceptance testing.* Wiley, New York, NY, USA, 2014. ISBN 1-118-90122-3 (paperback), 1-118-90125-8 (e-book), 1-118-90124-X (ePDF). xv + 222 pp. LCCN QA76.73.P98 .S254 2014eb.
- [Sal18] Adrian Salceanu. *Julia programming projects: learn Julia 1.x by building apps for data analysis, visualization, machine learning, and the Web.* Packt Publishing, Birmingham, UK, 2018. ISBN 1-78829-725-3. ix + 482 pp. LCCN QA76.73.J85. URL <http://proquest.safaribooksonline.com/?fpi=9781788292740>. [SB15]
- [San13] Leonard M. (Leonard Michael) Sander. *Equilibrium statistical physics: with computer simulations in Python.* CreateSpace Independent Publishing, North Charleston, SC, USA, 2013. ISBN 1-4910-6651-2. xii + 321 pp. LCCN QC174.8 .S36 2013.
- [San15] Dan Sanderson. *Programming Google App Engine with Python.* O’Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2015. ISBN 1-4919-0025-3, 1-4919-0024-5, 1-4919-0368-6 (e-book), 1-4919-0367-8 (e-book). xxi + 439 pp. LCCN TK5105.88813.
- [Sar14] M. O. Faruque Sarker. *Python network programming cookbook over 70 detailed recipes to develop practical solutions for a wide range of real-world network programming tasks.* Quick answers to common problems. Packt Publishing, Birmingham, UK, 2014. ISBN 1-84951-346-5. LCCN ????. URL <http://proquest.tech.safaribooksonline.de/9781849513463>. ■
- Tim Stevens and Wayne Boucher. *Python program-*

ming for biology, bioinformatics, and beyond. Cambridge University Press, Cambridge, UK, 2015. ISBN 0-521-89583-9 (hardcover), 0-521-72009-5 (paperback). viii + 702 + 8 pp. LCCN QH324.2 .S727 2014.

Smigaj:2015:SBI

[ŚBA⁺15]

Wojciech Śmigaj, Timo Betcke, Simon Arridge, Joel Phillips, and Martin Schweiger. Solving boundary integral problems with BEM++. *ACM Transactions on Mathematical Software*, 41(2):6:1–6:40, January 2015. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

Serrano:2017:MIP

[SBC⁺17]

E. Serrano, J. G. Blas, J. Carretero, M. Abella, and M. De-sco. Medical imaging processing on a big data platform using Python: Experiences with heterogeneous and homogeneous architectures. In *2017 17th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGRID)*, pages 830–837. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

Strickland:2014:PPM

[SBMD14]

Christopher Strickland, Robert Burdett, Kerrie Mengersen, and Robert Denham. PySSM: a Python module for Bayesian inference of linear Gaussian

state space models. *Journal of Statistical Software*, 57(6):??, April 2014. CODEN JSSOBK. ISSN 1548-7660. URL <http://www.jstatsoft.org/v57/i06>.

Sandha:2019:DDM

[SCAK⁺19]

Sandeep Singh Sandha, Wellington Cabrera, Mohammed Al-Kateb, Sanjay Nair, and Mani Srivastava. In-database distributed machine learning: demonstration using Teradata SQL engine. *Proceedings of the VLDB Endowment*, 12(12):1854–1857, August 2019. CODEN ????? ISSN 2150-8097.

Schillaci:2017:PP

[Sch17]

Michael Jay Schillaci. Perfectly Python. *Computing in Science and Engineering*, 19(6):51–53, November/December 2017. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic). URL <https://www.computer.org/csdl/mags/cs/2017/06/mcs2017060051.html>.

Schick:2021:UPT

[Sch21]

Daniel Schick. udkm1Dsim — a Python toolbox for simulating 1D ultrafast dynamics in condensed matter. *Computer Physics Communications*, 266(??):Article 108031, September 2021. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465521001430>.

- [Sco09] **Scott:2009:PLP**
 Michael L. Scott. *Programming Language Pragmatics*. Morgan Kaufmann Publishers, San Francisco, CA, USA, third edition, 2009. ISBN 0-12-374514-4. xxx + 910 pp. LCCN ????. Many sections of the book are relegated to the accompanying CD-ROM.
- [Sco17] **Scott:2017:PSI**
 Camille Scott. **shmlast**: an improved implementation of conditional reciprocal best hits with LAST and Python. *Journal of Open Source Software*, 2(9):142:1–142:4, January 2017. CODEN ????. ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00142>.
- [SDP+20] **Semper:2020:ERF**
 S. Semper, M. Döbereiner, S. Pawar, M. Landmann, and G. Del Galdo. **eadf**: Representation of far-field antenna responses in Python. *SoftwareX*, 12(??):Article 100583, July/December 2020. CODEN ????. ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S235271102030296X>.
- [SDS00] **Scherer:2000:SPV**
 David Scherer, Paul Dubois, and Bruce Sherwood. Scientific programming: VPython: 3D interactive scientific graphics for students. *Computing in Science and Engineering*, 2(5):56–62, September/October 2000. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic). URL <http://dlib.computer.org/cs/books/cs2000/pdf/c5056.pdf>.
- [SdSS16] **Siqueira:2016:PPP**
 Abel Soares Siqueira, Raniere Costa da Silva, and Luiz-Rafael Santos. **Perprof-py**: a Python package for performance profile of mathematical optimization software. *Journal of Open Research Software*, 4(1):e12-??, April 22, 2016. CODEN ????. ISSN 2049-9647. URL <https://openresearchsoftware.metajnl.com/articles/10.5334/jors.81/>.
- [Seg07] **Segaran:2007:PCI**
 Toby Segaran. *Programming collective intelligence: building Smart Web 2.0 applications*. O’Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2007. ISBN 0-596-52932-5, 0-596-55068-5. xxi + 334 pp. LCCN T58.5 .S43 2007. URL <http://www.oreilly.com/catalog/9780596529321>.
- [Sei09] **Seitz:2009:GPP**
 Justin Seitz. *Gray Hat Python: Python programming for hackers and reverse en-*

- gineers*. No Starch Press, San Francisco, CA, USA, 2009. ISBN 1-59327-192-1, 1-59327-224-3 (e-book). ??? pp. LCCN QA76.9.A25 S457 2009. URL <http://proquest.safaribooksonline.com/9781593271923>. ■
- [Sei14] Justin Seitz. *Black hat Python: Python programming for hackers and pentesters*. No Starch Press, San Francisco, CA, USA, 2014. ISBN 1-59327-590-0. xviii + 170 pp. LCCN QA76.73.P98 S45 2015.
- [Sev13] Charles Severance. *Python for informatics: exploring information*. CreateSpace Independent Publishing, North Charleston, SC, USA, 2013. ISBN 1-4923-3924-5. xii + 224 + 12 pp. LCCN QA76.73.P98 S48 2013b.
- [Sev15a] Charles Severance. Guido van Rossum: The early years of Python. *Computer*, 48(2):7–9, February 2015. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic). URL <http://csdl.computer.org/csdl/mags/co/2015/02/mco2015020007.html>.
- [Sev15b] Charles Severance. Guido van Rossum: The modern era of Python. *Computer*, 48(3):8–10, March 2015. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic). URL <http://csdl.computer.org/csdl/mags/co/2015/03/mco2015030008.html>.
- [SG18] Daniel G. A. Smith and Johnnie Gray. `opt_einsum` — a Python package for optimizing contraction order for einsum-like expressions. *Journal of Open Source Software*, 3(26):753:1–753:3, June 2018. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00753>.
- [SGPHD⁺17] Dzhoshkun Ismail Shakir, Luis Carlos García-Peraza-Herrera, Pankaj Daga, Tom Doel, Matthew J. Clarkson, Sébastien Ourselin, and Tom Vercauteren. **GIFT-Grab**: Real-time C++ and Python multi-channel video capture,
- Seitz:2014:BPP**
- Severance:2013:PIE**
- Severance:2015:GVRa**
- Severance:2015:GVRb**
- Sanders:2007:SMM**
- Smith:2018:POP**
- Shakir:2017:PGG**

- processing and encoding API. *Journal of Open Research Software*, 5(1):27–??, October 09, 2017. CODEN ????? ISSN 2049-9647. URL <https://openresearchsoftware.metajnl.com/articles/10.5334/jors.169/>. [Sha03]
- [SH17] Daniel Suess and Milan Holzäpfel. `mpnum`: a matrix product representation library for Python. *Journal of Open Source Software*, 2(20):465:1–465:2, December 2017. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00465>. [She97]
- [SH19a] Constantin Steppa and Tim L. Holch. HexagDLy — processing hexagonally sampled data with CNNs in PyTorch. *SoftwareX*, 9(??):193–198, January/June 2019. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711018302723>. [She15a]
- [SH19b] Dennis Svatunek and Kendall N. Houk. `autoDIAS`: a python tool for an automated distortion/interaction activation strain analysis. *Journal of Computational Chemistry*, 40(28):2509–2515, October 30, 2019. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic). [She15b]
- Shannon:2003:ABF**
- Christine Shannon. Another breadth-first approach to CS I using Python. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 35(1):248–251, January 2003. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic).
- Shell:1997:PDS**
- Jeffrey P. Shell. Python does scripts and objects — Python is a platform-independent OOP language with capabilities ranging from simple scripting to sophisticated object libraries. *Byte Magazine*, 22(2):63–64, February 1997. CODEN BYTEDJ. ISSN 0360-5280 (print), 1082-7838 (electronic).
- Shein:2015:NPB**
- Esther Shein. News: Python for beginners. *Communications of the ACM*, 58(3):19–21, March 2015. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). URL <http://cacm.acm.org/magazines/2015/3/183588/fulltext>.
- Sherrington:2015:MJD**
- Malcolm Sherrington. *Mastering Julia: develop your analytical and programming skills further in Julia to solve complex data processing problems*. Packt Publishing, Birmingham.

- ham, UK, 2015. ISBN 1-78355-331-6 (paperback), 1-78355-332-4 (e-book). xiv + 385 pp. LCCN QA76.7 .S547 2015; QA76.73.J8 S54 2015.
- [SHFJ18] **Sega:2018:PPP** Marcello Sega, György Hantatal, Balázs Fábián, and Pál Jedlovszky. Pytim: a Python package for the interfacial analysis of molecular simulations. *Journal of Computational Chemistry*, 39(25):2118–2125, September 30, 2018. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).
- [Shi07] **Shi:2007:PIG** Xuan Shi. Python for Internet GIS applications. *Computing in Science and Engineering*, 9(3):56–59, May/June 2007. CODEN CSENF. ISSN 1521-9615 (print), 1558-366X (electronic).
- [Sie17] **Siek:2017:CPT** Jeremy Siek. Challenges and progress toward efficient gradual typing (invited talk). *ACM SIGPLAN Notices*, 52(11):2, November 2017. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- [Sil14] **Sileika:2014:PPS** Rytis Sileika. *Pro Python system administration*. The expert’s voice in Python. Apress, Berkeley, CA, USA, second edition, 2014. ISBN 1-4842-0218-X (paperback), 1-4842-0217-1 (e-book). xxvi + 399 pp. LCCN QA76.73.P98 S55 2014.
- [Sit02] **Sitaker:2002:PPW** Kragen Sitaker. Python or Perl: Which is better? *login: the USENIX Association newsletter*, 27(3):??, June 2002. CODEN LOGNEM. ISSN 1044-6397. URL <http://www.usenix.org/publications/login/2002-06/pdfs/sitaker.pdf>.
- [SJK+21] **Sharma:2021:DDS** Moolchand Sharma, Bhanu Jain, Chetan Kargeti, Vinayak Gupta, and Deepak Gupta. Detection and diagnosis of skin diseases using residual neural networks (RESNET). *International Journal of Image and Graphics (IJIG)*, 21(05):??, December 2021. ISSN 0219-4678. URL <https://www.worldscientific.com/doi/10.1142/S0219467821400027>.
- [S JL18] **Stoliaroff:2018:PEU** Adrien Stoliaroff, Stéphane Jobic, and Camille Latouche. PyDEF 2.0: an easy to use post-treatment software for publishable charts featuring a graphical user interface. *Journal of Computational Chemistry*, 39(26):2251–2261, October 5, 2018. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).

- [SK19] **Spiegelberg:2019:TRE**
Leonhard F. Spiegelberg and Tim Kraska. Tuplex: robust, efficient analytics when Python rules. *Proceedings of the VLDB Endowment*, 12(12):1958–1961, August 2019. CODEN ????? ISSN 2150-8097.
- [SKS08] **Stubblebine:2008:RAK**
Toni Stubblebine, Peter Klicman, and Lars Schulten. *Reguläre Ausdrücke — kurz and gut [für Perl, Ruby, PHP, C#, Python, Java and .NET]*. O’Reillys Taschenbibliothek. O’Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, second edition, 2008. ISBN 3-89721-535-7. 131 pp. LCCN ????? EUR 9.90.
- [SL08] **Sanders:2008:SPP**
Ian D. Sanders and Sasha Langford. Students’ perceptions of Python as a first programming language at Wits. *SIGCSE Bulletin (ACM Special Interest Group on Computer Science Education)*, 40(3):365, September 2008. CODEN SIGSD3. ISSN 0097-8418 (print), 2331-3927 (electronic). Proceedings of ITiCSE ’08.
- [SL20] **Stansbury:2020:PAF**
Conrad Stansbury and Alessandra Lanzara. PyARPES: an analysis framework for multi-modal angle-resolved photoemission spectroscopies. *SoftwareX*, 11(??):Article 100472, January/June 2020. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711019301633>.
- [SL21] **Schwarz:2021:ICC**
Diana Estévez Schwarz and René Lamour. InitDAE: Computation of consistent values, index determination and diagnosis of singularities of DAEs using automatic differentiation in Python. *Journal of Computational and Applied Mathematics*, 387(??):Article 112486, ????? 2021. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0377042719304893>.
- [Sla15] **Slatkin:2015:EPS**
Brett Slatkin. *Effective Python: 59 specific ways to write better Python*. Effective software development series. Addison-Wesley, Reading, MA, USA, 2015. ISBN 0-13-403441-4. ????? pp. LCCN QA76.73.P98.
- [SLDF+21] **Singh:2021:MPL**
Sobhit Singh, Logan Lang, Viviana Dovale-Farelo, Uthpala Herath, Pedram Tavazde, François-Xavier Coudert, and Aldo H. Romero. MechElastic:■

- a Python library for analysis of mechanical and elastic properties of bulk and 2D materials. *Computer Physics Communications*, 267(??):Article 108068, October 2021. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465521001806>. **Smith:2015:C**
- [Smi15] Kurt W. Smith. *Cython*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2015. ISBN 1-4919-0155-1. 240 pp. LCCN ????. URL <http://proquest.safaribooksonline.com/9781491901731>. **Smith:2017:PUP**
- [SLGB14] Fabian H. Sinz, Jörn-Philipp Lies, Sebastian Gerwinn, and Matthias Bethge. *Natter*: a Python natural image statistics toolbox. *Journal of Statistical Software*, 61(5):??, November 2014. CODEN JSSOBK. ISSN 1548-7660. URL <http://www.jstatsoft.org/v61/i05>. **Smith:2018:PHC**
- [Smi17] Andrew P. Smith. *UKCensusAPI*: python and R interfaces to the nomisweb UK census data API. *Journal of Open Source Software*, 2(19):408:1, November 2017. CODEN ????. ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00408>. **Smith:2018:PHC**
- [SM04] Tony Stubblebine and Junko Mishima. *Seiki hyogen desukutoppu rifarensu: regular expressions for Perl, C, PHP, Python, Java, and .NET*. Orai Japan, Tokyo, Japan, 2004. ISBN 4-87311-170-6. vi + 96 pp. LCCN ????. **Smith:2012:SPB**
- [Sma12] Alex Small. Scientific Python for both expert and novice programmers. *Computing in Science and Engineering*, 14(2):6–7, March/April 2012. CODEN CSENF. ISSN 1521-9615 (print), 1558-366X (electronic). **Schroeder:2006:VTO**
- [SML06] Will Schroeder, Ken Martin, and Bill Lorenzen. *The visualization toolkit: an object-oriented approach to 3D graphics [visualize data in 3D — medical, engineering or scientific; build your own applica-*

tions with C++, Tcl, Java or Python; includes source code for VTK (supports UNIX, Windows and Mac)]. Kitware, Clifton Park, NY, fourth edition, 2006. ISBN 1-930934-19-X. xvi + 512 pp. LCCN ????

Smith:2022:ICC

[SMM⁺22]

Matthew J. Smith, Mohammad A. Mansournia, Camille Maringe, Paul N. Zivich, Stephen R. Cole, Clémence Leyrat, Aurélien Belot, Bernard Rachet, and Miguel A. Luque-Fernandez. Introduction to computational causal inference using reproducible Stata, R, and Python code: a tutorial. *Statistics in Medicine*, 41(2):407–432, January 30, 2022. CODEN SMEDDA. ISSN 0277-6715 (print), 1097-0258 (electronic).

Serang:2012:FMS

[SN12]

Oliver Serang and William Stratford Noble. Faster mass spectrometry-based protein inference: Junction trees are more efficient than sampling and marginalization by enumeration. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, 9(3):809–817, May 2012. CODEN ITCBCY. ISSN 1545-5963 (print), 1557-9964 (electronic).

Shajii:2019:SHP

[SNB⁺19]

Ariya Shajii, Ibrahim Numanagić, Riyadh Baghdadi,

Bonnie Berger, and Saman Amarasinghe. Seq: a high-performance language for bioinformatics. *Proceedings of the ACM on Programming Languages (PACMPL)*, 3(OOPSLA):125:1–125:29, October 2019. URL <https://dl.acm.org/doi/abs/10.1145/3360551>.

Sinaie:2017:PMP

[SNNB17]

Sina Sinaie, Viet Ha Nguyen, Chi Thanh Nguyen, and Stéphane Bordas. Programming the material point method in Julia. *Advances in Engineering Software*, 105(??):17–29, March 2017. CODEN AESODT. ISSN 0965-9978 (print), 0141-1195 (electronic). URL <https://www.sciencedirect.com/science/article/pii/S0965997816302769>.

Speck:2019:APP

Robert Speck. Algorithm 997: pySDC-prototyping spectral deferred corrections. *ACM Transactions on Mathematical Software*, 45(3):35:1–35:23, August 2019. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL <https://dl.acm.org/citation.cfm?id=3310410>.

Spielman:2018:PPP

[Spi18]

Stephanie J. Spielman. phyphy: Python package for facilitating the execution and parsing of HyPhy standard analyses. *Journal of Open Source Software*, 3(21):514:1, January

2018. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00514>. [SS13]
- Spotz:2012:PRA**
- [Spo12] William F. Spotz. PyTrilinos: Recent advances in the Python interface to Trilinos. *Scientific Programming*, 20(3): 311–325, ???? 2012. CODEN SCIPV. ISSN 1058-9244 (print), 1875-919X (electronic).
- Russell:2011:MSW**
- [sR11] Matthew A. (Computer scientist) Russell. *Mining the social web*. O’Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2011. ISBN 1-4493-8834-5 (paperback), 1-4493-0416-8 (e-book), 1-4493-0393-5 (e-book), 1-4493-9475-2. xx + 332 pp. LCCN QA76.9.D343 R87 2011. URL <http://twitter.com/\#!/SocialWebMining>.
- Saad:2019:PPS**
- [SR19] Tony Saad and Giovanna Ruai. PyMaxEnt: a Python software for maximum entropy moment reconstruction. *SoftwareX*, 10(??):Article 100353, July/December 2019. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711019302456>. [SSH08]
- Stefik:2013:EIP**
- Andreas Stefik and Susanna Siebert. An empirical investigation into programming language syntax. *ACM Transactions on Computing Education*, 13(4):19:1–19:??, November 2013. CODEN ???? ISSN 1946-6226.
- Sartore:2021:P**
- [SS21] Lohan Sartore and Ingo Schienbein. PyR@TE 3. *Computer Physics Communications*, 261(??):Article 107819, April 2021. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465520304124>.
- Silvestri:2022:SFP**
- [SSD⁺22] Luciano G. Silvestri, Lucas J. Stanek, Gautham Dharuman, Yongjun Choi, and Michael S. Murillo. Sarkas: a fast pure-Python molecular dynamics suite for plasma physics. *Computer Physics Communications*, 272(??):Article 108245, March 2022. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S001046552100357X>.
- Sala:2008:PHP**
- Marzio Sala, W. F. Spotz, and M. A. Heroux. PyTrilinos: High-performance distributed-

memory solvers for Python. *ACM Transactions on Mathematical Software*, 34(2):7:1–7:33, March 2008. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

Simon:2016:PIA

[SSH16]

Cory M. Simon, Berend Smit, and Maciej Haranczyk. pyIAST: Ideal adsorbed solution theory (IAST) Python package. *Computer Physics Communications*, 200(??):364–380, March 2016. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465515004403>.

Scheible:2007:MPR

[ST+07]

Jürgen Scheible, Ville Tuulos, et al. *Mobile Python: rapid prototyping of applications on the mobile platform*. Wiley, New York, NY, USA, 2007. ISBN 0-470-51505-8 (paperback). xx + 327 pp. LCCN QA76.73.P98 S34 2007. URL <http://www.loc.gov/catdir/enhancements/fy0739/2007029113-d.html>; <http://www.loc.gov/catdir/enhancements/fy0833/2007029113-b.html>; <http://www.loc.gov/catdir/enhancements/fy0833/2007029113-t.html>.

Stadler:2017:CCP

[Sta17]

Konstantin Stadler. The country converter coco — a Python package for convert-

ing country names between different classification schemes. *Journal of Open Source Software*, 2(16):332:1–332:2, August 2017. CODEN ????? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00332>.

Staub:2019:XHA

[Sta19]

Florian Staub. xSLHA: an Les Houches Accord reader for Python and Mathematica. *Computer Physics Communications*, 241(??):132–138, August 2019. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465519300918>.

Stelter:2006:BHA

[Ste06]

Fred Stelter. Building a home automation and security system with Python. *Linux journal*, 2006(142):4, February 2006. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).

Stewart:2014:PS

John Stewart. *Python for Scientists*. Cambridge University Press, Cambridge, UK, 2014. ISBN 1-107-06139-3 (hardcover), 1-107-68642-3. xii + 220 pp. LCCN Q183.9 .S865 2014. URL <http://assets.cambridge.org/97811070/61392/cover/9781107061392.jpg>.

Stone:2013:BRT

- [Sto13] James V. Stone. *Bayes' rule: a tutorial introduction to Bayesian analysis*. Sebtel Press, Lexington, KY, USA, 2013. ISBN 0-9563728-4-8 (paperback). 170 pp. LCCN QA279.5 .S766 2013.

Sharma:2018:RWF

- [STS+18] Abhishek Sharma, Yuan Tian, Agus Sulistya, Dinusha Wijedasa, and David Lo. Recommending who to follow in the software engineering Twitter space. *ACM Transactions on Software Engineering and Methodology*, 27(4):16:1–16:??, November 2018. CODEN ATSMER. ISSN 1049-331X (print), 1557-7392 (electronic).

Stubblebine:2003:REP

- [Stu03] Tony Stubblebine. *Regular expression pocket reference*. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2003. ISBN 0-596-00415-X. vi + 93 pp. LCCN QA76.9.T48 S78 2003. URL <http://www.oreilly.com/catalog/9780596004156>.

Stubblebine:2007:REP

- [Stu07] Tony Stubblebine. *Regular expression pocket reference: Regular expressions for Perl,*

Ruby, PHP, Python, C, Java, and .NET. O'Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, second edition, 2007. ISBN 0-596-51427-1 (paperback). vii + 117 pp. LCCN QA76.9.T48 S78 2007. URL <http://proquest.safaribooksonline.com/9780596514273>; <http://www.loc.gov/catdir/toc/fy0802/2007281074.html>.

Suchojad:2013:ZAE

- [Suc13] Dariusz Suchojad. Zato — agile ESB, SOA, REST and cloud integrations in Python. *Linux journal*, 2013(235):2:1–2:??, November 2013. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).

Summerfield:2008:RGP

- [Sum08] Mark Summerfield. *Rapid GUI programming with Python and Qt: the definitive guide to PyQt programming*. Prentice Hall open source software development series. Prentice-Hall, Englewood Cliffs, NJ 07632, USA, 2008. ISBN 0-13-235418-7 (hardcover). xiv + 625 pp. LCCN QA76.9.U83 S89 2008.

Summerfield:2009:PPC

- [Sum09] Mark Summerfield. *Programming in Python 3: a complete introduction to the Python language*. Developer's library. Addison-Wesley, Reading, MA,

- USA, 2009. ISBN 0-13-712929-7 (paperback). xiv + 525 pp. LCCN QA76.73.P98 S86 2009.
- [Sum10] **Summerfield:2010:PPC**
 Mark Summerfield. *Programming in Python 3: a complete introduction to the Python language*. Developer's library. Addison-Wesley, Reading, MA, USA, second edition, 2010. ISBN 0-321-68056-1 (paperback). xvi + 630 pp. LCCN QA76.73.P98 S86 2010.
- [SUM21] **Schwarz:2021:PPF**
 Sebastian Schwarz, Sebastian Alexander Uerlich, and Antonello Monti. **pycity_scheduling** — a Python framework for the development and assessment of optimisation-based power scheduling algorithms for multi-energy systems in city districts. *SoftwareX*, 16(??): ??, December 2021. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021001230>.
- [Suz97] **Suzuki:1997:P**
 Junichi Suzuki. Python. *Japanese Dr Dobbs*, ??(??):??, ??? 1997. A series of seven articles on Python.
- [SV14] **Sandner:2014:CMC**
 Raimar Sandner and András Vukics. C++QEDv2 Milestone 10: a C++/Python application-programming framework for simulating open quantum dynamics. *Computer Physics Communications*, 185(9):2380–2382, September 2014. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465514001349>.
- [SVY09] **Shacham:2009:CAS**
 Ohad Shacham, Martin Vechev, and Eran Yahav. Chameleon: adaptive selection of collections. *ACM SIGPLAN Notices*, 44(6):408–418, June 2009. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- [SW14] **Sabia:2014:PTV**
 Martino Sabia and Cathy Wang. *Python tools for Visual Studio leverage the power of the Visual Studio IDE to develop better and more efficient Python projects*. Community experience distilled. Packt Publishing, Birmingham, UK, 2014. ISBN 1-78328-868-X, 1-78328-869-8. LCCN QA76.73.P98. URL <http://proquest.tech.safaribooksonline.de/9781783288687>.
- [SW15] **Sarker:2015:LPN**
 M. O. Faruque Sarker and Sam Washington. *Learning Python network programming: utilize Python 3 to get network applications up and running quickly and easily*. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78439-600-1, 1-78439-115-8 (e-book). 320 (est.) pp. LCCN

QA76.73.P98. URL <http://proquest.safaribooksonline.com/9781784396008>.

Sedgewick:2015:IPP

- [SWD15] Robert Sedgewick, Kevin Daniel Wayne, and Robert Dondero. *Introduction to programming in Python: an interdisciplinary approach*. Addison-Wesley, Reading, MA, USA, 2015. ISBN 0-13-407653-2, 0-13-407643-5. ??? pp. LCCN QA76.73.P98. URL <http://proquest.safaribooksonline.com/?fpi=9780134076539>. [Swi09]

Sweigart:2009:PPL

- [Swe09] Albert Sweigart. *Playing with Python: learn to program by making games*. No Starch Press, San Francisco, CA, USA, 2009. ISBN 1-59327-198-0 (paperback). ??? pp. LCCN ??? [SYGY21]

Sweigart:2013:HSC

- [Swe13] Al Sweigart. *Hacking Secret Ciphers with Python: [a beginner's guide to cryptography and computer programming with Python]*. CreateSpace Independent Publishing, North Charleston, SC, USA, 2013. ISBN 1-4826-1437-5. 436 pp. LCCN ??? URL <http://swbplus.bsz-bw.de/bsz40205301Xinh.htm>. [Tab10]

Sweigart:2014:ABS

- [Swe14] Al Sweigart. *Automate the boring stuff with python: practical programming for total beginners*. No Starch Press, San Francisco, CA, USA, 2014. ISBN 1-59327-599-4. xxi + 479 pp. LCCN QA76.73.P98. URL <http://proquestcombo.safaribooksonline.com/9781457189906>. [Swinnen:2009:APA]

Swinnen:2009:APA

Gérard Swinnen. *Apprendre à programmer avec Python: objet, multithreading, événements, bases de données, programmation web, programmation réseau, Unicode*. Eyrolles, Paris, France, 2009. xviii + 341 pp. LCCN ???

Shi:2021:CMS

Yanjun Shi, Hao Yu, Yijia Guo, and Zhiheng Yuan. A collaborative merging strategy with lane changing in multi-lane freeway on-ramp area with V2X network. *Future Internet*, 13(5):123, May 10, 2021. CODEN ??? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/13/5/123>.

Tabba:2010:ACP

Fuad Tabba. Adding concurrency in Python using a commercial processor's hardware transactional memory support. *ACM SIGARCH Computer Architecture News*, 38(5):12–19, December 2010. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE).

Talbot:2000:WGT

Hugues Talbot. wxPython, a GUI toolkit. *Linux journal*, 74:??, June 2000. CO-

DEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).

Tan:2001:JWP

[Tan01]

C. K. Tan. A JDBC wrapper — in Python! *Dr. Dobb's Journal of Software Tools*, 26 (8):50, 52, 54, August 2001. CODEN DDJOEB. ISSN 1044-789X. URL http://www.ddj.com/ftp/2001/2001_08/jdbc.py.txt; http://www.ddj.com/ftp/2001/2001_08/jdbc.py.zip.

[TBA+17]

Tanimoto:2006:IPA

[Tan06]

Steven L. Tanimoto. *Introduction to Python for Artificial Intelligence*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006. ISBN ???? ???? pp. LCCN ???? US\$19.00. URL <http://www.computer.org/portal/pages/ieeecs/ReadyNotes/tanimotoabstract.html>.

[TBJ18]

Tauber:2016:PPP

[Tau16]

J. K. Tauber. *pyuca*: a Python implementation of the Unicode Collation Algorithm. *Journal of Open Source Software*, 1(1):21:1, May 2016. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00021>.

[TCE21]

Taylor:2018:PPP

[Tay18]

Shawn David Taylor. *pyPhenology*: a python framework for plant phenology modelling. *Journal of Open Source Soft-*

ware, 3(28):827:1–827:2, August 2018. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00827>.

Tejedor:2017:PPC

Enric Tejedor, Yolanda Becerra, Guillem Alomar, Anna Queralt, Rosa M. Badia, Jordi Torres, Toni Cortes, and Jesús Labarta. PyCOMPSs: Parallel computational workflows in Python. *The International Journal of High Performance Computing Applications*, 31 (1):66–82, January 2017. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic).

Turcani:2018:SPT

Lukas Turcani, Enrico Bernardo, and Kim E. Jelfs. *stk*: a Python toolkit for supramolecular assembly. *Journal of Computational Chemistry*, 39(23):1931–1942, September 5, 2018. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).

Terven:2021:KAK

Juan R. Terven and Diana M. Córdova-Esparza. *KinZ*: an Azure Kinect toolkit for Python and Matlab. *Science of Computer Programming*, 211(??):??, November 1, 2021. CODEN SCPGD4. ISSN 0167-6423 (print), 1872-7964 (electronic). URL <http://www.sciencedirect>.

- com/science/article/pii/S0167642321000952.
- Tan:2018:EPB**
- [TEG18] Jianchao Tan, Jose Echevarria, and Yotam Gingold. Efficient palette-based decomposition and recoloring of images via RGBXY-space geometry. *ACM Transactions on Graphics*, 37(6):262:1–262:??, November 2018. CODEN ATGRDF. ISSN 0730-0301 (print), 1557-7368 (electronic).
- Telles:2006:PPC**
- [Tel06] Matthew A. Telles. *Python power!: the comprehensive guide*. Thomson Course Technology PTR, Boston, MA, USA, 2006. ISBN 1-59863-158-6. xx + 508 pp. LCCN QA76.73.P98 T45 2006.
- Tan:2021:ETD**
- [TFAL21] Jie Tan, Daniel Feitosa, Paris Avgeriou, and Mircea Lungu. Evolution of technical debt remediation in Python: a case study on the Apache Software Ecosystem. *Journal of Software: Evolution and Process*, 33(4):e2319:1–e2319:??, April 2021. CODEN ???? ISSN 2047-7473 (print), 2047-7481 (electronic).
- Tohline:2009:CPM**
- [TGEA09] Joel E. Tohline, Jinghya Ge, Wesley Even, and Erik Anderson. A customized Python module for CFD flow analysis within VisTrails. *Computing in Science and Engineering*, 11(3):68–73, May/June 2009. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).
- Theis:2009:EPC**
- [The09] Thomas Theis. *Einstieg in Python 3: [auf CD: Python 3 und alle Code-Beispiele des Buchs ; für Programanfänger und Umsteiger ; mit vielen Beispielen und Übungsaufgaben ; inkl. objektorientierter Programmierung, Datenbanken, Internet u.v.m.]*. Galileo computing. Galileo Press, Bonn, Germany, second edition, 2009. ISBN 3-8362-1406-7. 399 pp. LCCN ???? EUR 24.90.
- Tidwell:2007:XXM**
- [Tid07] Doug Tidwell. *XSLT: mastering XML transformations*. O’Reilly & Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, second edition, 2007. ISBN 0-596-52721-7 (paperback). xviii + 965 pp. LCCN QA76.73.X58 T53 2008. US\$31.99.
- Tien:2016:PPM**
- [Tie16] Vivienne Tien. Python and physical modeling. *Computing in Science and Engineering*, 18(3):8–10, May/June 2016. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).

- [Tom15] **Toms:2015:AAG**
 Silas Toms. *ArcPy and ArcGIS-geospatial analysis with Python: use the ArcPy module to automate the analysis and mapping of geospatial data in ArcGIS*. Community experience distilled. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78398-866-5, 1-78398-867-3 (e-book). 224 (est.) pp. LCCN G70.212. URL <http://proquest.safaribooksonline.com/?fpi=9781783988662>.
- [Tos09] **Tosi:2009:MPD**
 Sandro Tosi. *Matplotlib for Python developers: build remarkable publication quality plots the easy way*. From technologies to solutions. Packt Publishing, Birmingham, UK, 2009. ISBN 1-84719-790-6. iv + 293 pp. LCCN QA76.73.P48 T67 2009.
- [TR22] **Tawfik:2022:PPP**
 Sherif Abdulkader Tawfik and Salvy P. Russo. PyPhotonics: a Python package for the evaluation of luminescence properties of defects. *Computer Physics Communications*, 273(??):Article 108222, April 2022. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465521003349>.
- [Tro96a] **Troan:1996:FSSb**
 Erik Troan. Free software solutions: Basic X programming in Python. *The X Journal: Computing Technology with the X Window System*, 5(6):84-??, June 1996. CODEN XJOUEA. ISSN 1056-7003.
- [Tro96b] **Troan:1996:FSSc**
 Erik Troan. Free software solutions: Meta widgets in Python. *The X Journal: Computing Technology with the X Window System*, 5(7):??, July/August 1996. CODEN XJOUEA. ISSN 1056-7003.
- [Tro96c] **Troan:1996:FSSa**
 Erik Troan. Free software solutions: The Python language. *The X Journal: Computing Technology with the X Window System*, 5(5):96-??, May 1996. CODEN XJOUEA. ISSN 1056-7003.
- [Tro97] **Troan:1997:FSS**
 Eric Troan. Free software solutions: From Python to Java. *UNIX Developer*, 1(1):77-78, January/February 1997. ISSN 1090-2279.
- [TS14] **Trevino:2014:ANP**
 Jeffrey Treviño and Craig Sapp. Automated notation of piano recordings for historic performance practice study. *Journal on Computing and Cultural Heritage (JOCCH)*, 7(3):17:1-17:??, August 2014. CODEN ????? ISSN 1556-4673 (print), 1556-4711 (electronic).

- [TS20] **Tartarini:2020:PPP**
 Federico Tartarini and Stefano Schiavon. `pythermalcomfort`: a Python package for thermal comfort research. *SoftwareX*, 12(??):Article 100578, July/December 2020. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020302910>.
- [TSC02] **Thiruvathukal:2002:WPT**
 George K. (George Kuriakose) Thiruvathukal, John P. Shafae, and Thomas W. Christopher. *Web programming: techniques for integrating Python, Linux, Apache, and MySQL*. P T R Prentice-Hall, Englewood Cliffs, NJ 07632, USA, 2002. ISBN 0-13-041065-9. xviii + 745 pp. LCCN QA76.625 .T48 2002. URL http://www.phptr.com/ptrbooks/ptr_0130410659.html.
- [TSD⁺12] **Takikawa:2012:GTF**
 Asumu Takikawa, T. Stephen Strickland, Christos Dimoulas, Sam Tobin-Hochstadt, and Matthias Felleisen. Gradual typing for first-class classes. *ACM SIGPLAN Notices*, 47(10):793–810, October 2012. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- [TT21] **Theisen:2021:FTM**
 Lambert Theisen and Manuel Torrilhon. `fenicsR13`: a tensorial mixed finite element solver for the linear R13 equations using the FEniCS computing platform. *ACM Transactions on Mathematical Software*, 47(2):17:1–17:29, April 2021. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL <https://dl.acm.org/doi/10.1145/3442378>.
- [TTS⁺10] **Tatsubori:2010:EJT**
 Michiaki Tatsubori, Akihiko Tozawa, Toyotaro Suzumura, Scott Trent, and Tamiya Onodera. Evaluation of a just-in-time compiler retrofitted for PHP. *ACM SIGPLAN Notices*, 45(7):121–132, July 2010. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- [TV13] **Toby:2013:GIG**
 Brian H. Toby and Robert B. Von Dreele. GSAS-II: the genesis of a modern open-source all purpose crystallography software package. *Journal of Applied Crystallography*, 46(2):544–549, 2013. CODEN JACGAR. ISSN 0021-8898 (print), 1600-5767 (electronic).
- [ÜK12] **Ucoluk:2012:IPC**
 Göktürk Üçoluk and Sinan Kalkan. *Introduction to programming concepts with case studies in Python*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2012. ISBN 3-

7091-1342-3, 3-7091-1343-1 (e-book). LCCN QA76.6 .U26 2012.

Ulloa:2015:KIA

[Ull15]

Roberto Ulloa. *Kivy — interactive applications and games in Python: create responsive cross-platform UI/UX applications and games in Python and using the open source Kivy library*. Community Experience Distilled. Packt Publishing, Birmingham, UK, second edition, 2015. ISBN 1-78528-692-7, 1-78528-438-X. 206 (est.) pp. LCCN QA76.73.P98. URL <http://proquest.safaribooksonline.com/?fpi=9781785286926>.

USENIX:1996:PSUb

[USE96]

USENIX, editor. *Proceedings of the Second USENIX Conference on Object-Oriented Technologies and Systems (COOTS), June 17–21, 1996, Toronto, Canada*. USENIX, Berkeley, CA, USA, 1996. ISBN 1-880446-77-4. LCCN QA76.64 .U85 1996. URL <http://www.usenix.org/publications/library/proceedings/coots96/>

USENIX:2000:PAL

[USE00]

USENIX, editor. *Proceedings of the 4th Annual Linux Showcase and Conference, Atlanta, October 10–14, 2000, Atlanta, Georgia, USA*. USENIX, Berkeley, CA, USA, 2000. ISBN 1-880446-17-0. LCCN ????

URL <http://www.usenix.org/publications/library/proceedings/als2000/>.

UIIG:1995:VBA

[UVa95]

UVa User Interface Group. VR blackboard: Alice: Rapid prototyping for virtual reality. *IEEE Computer Graphics and Applications*, 15(3):8–11, May 1995. CODEN ICGADZ. ISSN 0272-1716 (print), 1558-1756 (electronic).

Vaingast:2009:BPV

[Vai09]

Shai Vaingast. *Beginning Python visualization: crafting visual transformation scripts*. Apress, Berkeley, CA, USA, 2009. ISBN 1-4302-1843-6 (paperback). xx + 363 pp. LCCN QA76.73.P98 V35 2009.

Vaingast:2014:BPV

[Vai14]

Shai Vaingast. *Beginning Python visualization crafting visual transformation scripts*. Expert's voice in Python. Apress, Berkeley, CA, USA, second edition, 2014. ISBN 1-4842-0053-5. LCCN ????. URL <http://proquest.tech.safaribooksonline.de/9781484200520>.

vanRossum:1995:EEP

[van95a]

Guido van Rossum. Extending and embedding the Python interpreter. Report CS-R9527, Centrum voor Wiskunde en Informatica, P. O. Box 4079, 1009 AB Amsterdam, The Netherlands, April 1995. i + 22 pp.

- [van95b] **vanRossum:1995:PLR**
 Guido van Rossum. Python library reference. Report CS-R9524, Centrum voor Wiskunde en Informatica, P. O. Box 4079, 1009 AB Amsterdam, The Netherlands, April 1995. iv + 186 pp. URL <http://www.python.org/doc/lib/lib.html>.
- [van95c] **vanRossum:1995:PRM**
 Guido van Rossum. Python reference manual. Report CS-R9525, Centrum voor Wiskunde en Informatica, P. O. Box 4079, 1009 AB Amsterdam, The Netherlands, April 1995. ii + 54 pp. URL <http://www.python.org/doc/ref/ref-1.html>.
- [van95d] **vanRossum:1995:PT**
 Guido van Rossum. Python tutorial. Report CS-R9526, Centrum voor Wiskunde en Informatica, P. O. Box 4079, 1009 AB Amsterdam, The Netherlands, April 1995. iii + 65 pp. URL <http://www.python.org/doc/tut/tut.html>.
- [van97a] **vanRossum:1997:P**
 Guido van Rossum. Python. *World Wide Web Journal*, 2 (2):??, Spring 1997. CODEN WWFFL. ISSN 1085-2301. URL <http://www.ora.com/catalog/wj6/>.
- [Van97b] **Vanaken:1997:WCS**
 Michel Vanaken. Writing CGI scripts in Python. *Linux journal*, 34:??, February 1997. CODEN LIJOFX. ISSN 1075-3583 (print), 1938-3827 (electronic).
- [van98a] **vanRossum:1998:TPL**
 G. van Rossum. A tour of the Python language. In Ege et al. [ESM98], pages 370-?? ISBN 0-8186-8383-X. LCCN ????. IEEE catalog number 97TB100221.
- [van98b] **vanRossum:1998:EEP**
 Guido van Rossum. Extending and embedding the Python interpreter. Technical report, Corporation for National Research Initiatives, 1895 Preston White Drive, Suite 100, Reston, VA 20191, USA, April 14, 1998. URL <http://www.python.org/doc/ext/ext.html>. For Python Release 1.5.1.
- [van98c] **vanRossum:1998:PCA**
 Guido van Rossum. Python/C API reference manual. Technical report, Corporation for National Research Initiatives, 1895 Preston White Drive, Suite 100, Reston, VA 20191, USA, 1998. URL <http://www.python.org/doc/api/api.html>. For Python Release 1.5.1.
- [Van16] **Vanderplas:2016:PDS**
 Jake Vanderplas. *Python Data Science Handbook*. O'Reilly &

- Associates, Inc., 103a Morris Street, Sebastopol, CA 95472, USA, Tel: +1 707 829 0515, and 90 Sherman Street, Cambridge, MA 02140, USA, Tel: +1 617 354 5800, 2016. ISBN 1-4919-1205-7. ??? pp. LCCN ???
- [VAP⁺21] **Verstraelen:2021:IPL**
Toon Verstraelen, William Adams, Leila Pujal, Alireza Tehrani, Braden D. Kelly, Luis Macaya, Fanwang Meng, Michael Richer, Raymundo Hernández-Esparza, Xiaotian Derick Yang, Matthew Chan, Taewon David Kim, Maarten Cools-Ceuppens, Valerii Chuiko, Esteban Vöhringer-Martinez, Paul W. Ayers, and Farnaz Heidar-Zadeh. IOData: a Python library for reading, writing, and converting computational chemistry file formats and generating input files. *Journal of Computational Chemistry*, 42(6):458–464, March 5, 2021. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).
- [Var16] **Varley:2016:EPP**
Ryan Varley. ExoData: a Python package to handle large exoplanet catalogue data. *Computer Physics Communications*, 207(??):298–309, October 2016. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465516301254>.
- [VB08] **Vallisneri:2008:PXA**
Michele Vallisneri and Stanislav Babak. Python and XML for agile scientific computing. *Computing in Science and Engineering*, 10(1):80–87, January/February 2008. CODEN CSENF. ISSN 1521-9615 (print), 1558-366X (electronic).
- [VBB18] **Villaverde:2018:PTI**
Alejandro F. Villaverde, Kolja Becker, and Julio R. Banga. PREMER: a tool to infer biological networks. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, 15(4):1193–1202, July 2018. CODEN ITCBCY. ISSN 1545-5963 (print), 1557-9964 (electronic).
- [VBM⁺18] **Vrbancic:2018:PNP**
Grega Vrbančič, Lucija Brezočnik, Uroš Mlakar, Dušan Fister, and Iztok Fister, Jr. NiaPy: Python microframework for building nature-inspired algorithms. *Journal of Open Source Software*, 3(23):613:1–613:3, March 2018. CODEN ??? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00613>.
- [VC18] **Vidmar:2018:QPP**
R. Vidmar and N. Creati. QCobj: a Python package to handle quantity-aware

- configuration files. *SoftwareX*, 7(??):347–351, January/June 2018. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711018302383>.
- [Vishart:2021:PPB] Jonas Lynge Vishart, Jaime Castillo-León, and Winnie E. Svendsen. pyEIA: a Python-based framework for data analysis of electrochemical methods for immunoassays. *SoftwareX*, 15(??):??, July 2021. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021000637>.
- [VCR17] Vladimir Vivien, Mario Contreras, and Mat Ryer. *Go: Design Patterns for Real-World Projects*. Packt Publishing, Birmingham, UK, 2017. ISBN 1-78839-055-5, 1-78839-287-6. 1091 pp. LCCN ???? [vF97]
- [vd91] G. van Rossum and J. de Boer. Linking a stub generator (AIL) to a prototyping language (Python). In EurOpen [Eur91], pages 229–247. ISBN 1-873611-00-5. LCCN ???? [VFMM08]
- [vdH18] Ruud van der Ham. salabim: discrete event simulation and animation in Python. *Journal of Open Source Software*, 3(27):767:1–767:2, July 2018. CODEN ???? ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00767>.
- [vdenOord:2020:PID] Gijs van den Oord, Fredrik Jansson, Inti Pelupessy, Maria Chertova, Johanna H. Grönqvist, Pier Siebesma, and Daan Crommelin. A Python interface to the Dutch Atmospheric Large-Eddy Simulation. *SoftwareX*, 12(??):Article 100608, July/December 2020. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020303216>.
- [vonLowis:1997:PB] Martin von Löwis and Nils Fischbeck. *Das Python-Buch*. Addison-Wesley Longman, Reading, MA, USA, 1997. ISBN 3-8273-1110-1. 495 pp. DM 69,90; ATS 510; CHR 63,00. Includes CD-ROM.
- [VanHensbergen:2008:HAR] Eric Van Hensbergen, Charles Forsyth, Jim McKie, and Ron Minnich. Holistic aggregate resource environment. *Operating Systems Review*, 42(1): 85–91, January 2008. CODEN OSRED8. ISSN 0163-5980 (print), 1943-586X (electronic).
- [Virmani:2016:CFU] Vineet Virmani. Computational finance using QuantLib

- Python. *Computing in Science and Engineering*, 18(2): 78–88, March/April 2016. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic). [vRD03]
- [VKSB15] **Vitousek:2015:DEG**
Michael M. Vitousek, Andrew M. Kent, Jeremy G. Siek, and Jim Baker. Design and evaluation of gradual typing for Python. *ACM SIGPLAN Notices*, 50(2):45–56, February 2015. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- [VMFG17] **Vieira:2017:WCC**
Camilo Vieira, Alejandra J. Magana, Michael L. Falk, and R. Edwin Garcia. Writing in-code comments to self-explain in computational science and engineering education. *ACM Transactions on Computing Education*, 17(4):17:1–17:??, September 2017. CODEN ????? ISSN 1946-6226.
- [VPO19] **Verma:2019:CAH**
Pradeepika Verma, Sukomal Pal, and Hari Om. A comparative analysis on Hindi and English extractive text summarization. *ACM Transactions on Asian and Low-Resource Language Information Processing (TALLIP)*, 18(3):30:1–30:??, July 2019. CODEN ????? ISSN 2375-4699 (print), 2375-4702 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3308754. [vRDK99]
- vanRossum:2003:IPR**
Guido van Rossum and Fred L. Drake, Jr., editors. *An introduction to Python: release 2.2.2*. Network Theory Ltd., Bristol, UK, 2003. ISBN 0-9541617-6-9. ii + 115 pp. LCCN ????
- vanRossum:2005:PLR**
Guido van Rossum and Fred L. Drake, Jr. *Python Language Reference Manual*. Network Theory Ltd., Bristol, UK, 2005. ISBN 0-9541617-8-5. ii + 112 pp. LCCN QA76.73.P98. URL <http://www.network-theory.co.uk/python/language/>.
- vanRossum:2005:PTI**
Guido van Rossum and Fred L. Drake, Jr. *The Python Tutorial — An Introduction to Python*. Network Theory Ltd., Bristol, UK, 2005. ISBN 0-9541617-6-9. 124 (est.) pp. LCCN ????
- vanRossum:1999:PT**
Guido van Rossum, Fred L. Drake, and Andrew Kuchling. *Python tutorial*. Open Docs Library, Lincoln, NE, USA, 1999. ISBN 1-58348-375-6 (soft cover). LCCN QA76.73.P98 V36 2000b. URL <ftp://uiarchive.cso.uiuc.edu/pub/etext/gutenberg/>.
- Vitousek:2017:BTL**
Michael M. Vitousek, Cameron Swords, and Jeremy G. Siek. [VSS17]

- Big types in little runtime: open-world soundness and collaborative blame for gradual type systems. *ACM SIGPLAN Notices*, 52(1):762–774, January 2017. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic). [Wal97]
- [VY15] Jan Verschelde and Xiangcheng Yu. Polynomial homotopy continuation on GPUs. *ACM Communications in Computer Algebra*, 49(4):130–133, December 2015. CODEN ????? ISSN 1932-2232 (print), 1932-2240 (electronic). **Verschelde:2015:PHC**
- [Wai21] Richard Wai. XERIS/APEX. *ACM SIGADA Ada Letters*, 40(2):65–69, April 2021. CODEN AALEE5. ISSN 1094-3641 (print), 1557-9476 (electronic). URL <https://dl.acm.org/doi/10.1145/3463478.3463484>. **Wai:2021:XA**
- [WAK22] Simon Welker, Muhamed Amin, and Jochen Küpper. CMInject: Python framework for the numerical simulation of nanoparticle injection pipelines. *Computer Physics Communications*, 270(??):Article 108138, January 2022. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465521002502>. **Welker:2022:CPF**
- [WAN⁺22] S. D. Walker, A. Abramov, L. J. Nevay, W. Shields, and S. T. Boogert. Pyg4ometry: a Python library for the creation of Monte Carlo radiation transport physical geometries. *Computer Physics Communications*, 272(??):Article 108228, March 2022. CODEN CPHCBZ. **Walker:2022:POP**
- Walnut Creek. The Python archive. CD ROM., June 1997. US\$39.95. URL <http://www.cdrom.com/titles/prog/python.htm>. Includes precompiled versions of Python for: AIX, BeOS, BSDI, Digital Unix (DEC OSF/1), DGUX, FreeBSD, HPUX, IRIX, Linux, Mac OS, OpenVMS (alpha and VAX), OS/2 (emx), RS6000, SCO, Sequent PTS, SGI IRIX, Solaris x86, Sparc/Solaris, Sparc/SunOS, Ultrix, VMS/VAX, and Windows 95/NT. **WalnutCreek:1997:PA**
- [Wal07] Peter Walerowski, editor. *Python: 5 Stunden Video-Training: PC, Mac und TV*, volume 6080 of *Video2Brain; Addison-Wesley; Open source library*. Addison-Wesley, Reading, MA, USA, 2007. ISBN 3-8273-6080-3. LCCN ???? EUR 49.95. One DVD. **Walerowski:2007:PSV**

ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465521003404>. [Wei06a]

Warner:2018:IPP

[War18] Mellissa S. C. Warner. Introduction to PySPLIT: a Python toolkit for NOAA ARL's HYSPLIT model. *Computing in Science and Engineering*, 20(5):47–62, September/October 2018. CODEN CSENF. ISSN 1521-9615 (print), 1558-366X (electronic). URL <https://www.computer.org/csdl/mags/cs/2018/05/mcs2018050047-abs.html>.

Watters:1995:TAN

[Wat95] Aaron R. Watters. Tutorial article no. 005: The what, why, who, and where of Python. *UnixWorld Online*, ??(??):??, ??? 1995. URL <http://www.wcmh.com/uworld/archives/95/tutorial/005.html>.

Wacha:2021:PPE

[WBS21] András Wacha and Tamás Beke-Somfai. PmlBeta: a PyMOL extension for building β -amino acid insertions and β -peptide sequences. *SoftwareX*, 13(??):Article 100654, January 2021. CODEN ??? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020303678>. [Wei09]

Weigend:2006:OPP

Michael Weigend. *Objektorientierte Programmierung mit Python: [Klassen, Objekte, Vererbung und Polymorphie praktisch angewendet; XML, GUI-Programmierung, Threads und CGI-Scripting; Übungen mit Musterlösungen zu jedem Kapitel]*. Programmierung. mitp, Bonn, Germany, third edition, 2006. ISBN 3-8266-1660-X. 700 pp. LCCN ??? EUR 36.95. URL <http://www.gbv.de/dms/ilmenau/toc/510475221.pdf>.

Weigend:2006:PGP

Michael Weigend. *Python Ge-Packt: [schneller Zugriff auf Module, Klassen und Funktionen; XML, Tkinter, Datenbanken, Internet-Programmierung; objektorientierte Programmierung und New-Style-Klassen]*. Ge-Packte Referenz. mitp, Heidelberg, Germany, third edition, 2006. ISBN 3-8266-1659-6. 618 pp. LCCN ??? EUR 17.95. URL <http://www.gbv.de/dms/bsz/toc/bsz254799760inh.pdf>.

Weigend:2009:OPP

Michael Weigend. *Objektorientierte Programmierung mit Python 3.0*. mitp bei Redline. REDLINE, Heidelberg, Neckar, Germany, fourth edition, 2009. ISBN 3-8266-1750-

9. 752 pp. LCCN ????. EUR 39.95.

Weiming:2015:MPF

[Wei15]

James Ma Weiming. *Mastering Python for finance: understand, design, and implement state-of-the-art mathematical and statistical applications used in finance with Python*. Community Experience Distilled. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78439-451-3. xv + 312 pp. LCCN ????

[Wet20]

QA76.73.P98. URL <http://proquest.safaribooksonline.com/?fpi=9781782174516>.

Wette:2020:SPO

Karl Wette. SWIGLAL: Python and Octave interfaces to the LALSuite gravitational-wave data analysis libraries. *SoftwareX*, 12(??):Article 100634, July/December 2020. CODEN ????. ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020303472>.

Weppner:2015:DPS

[Wep15]

Stephen Weppner. A different perspective on scientific programming [review of “Annotated algorithms in Python; with applications in physics, biology, and finance” (Di Pierro, M.; 2013)]. *Computing in Science and Engineering*, 17(1):6–7, January/February 2015. CODEN CSENF. ISSN 1521-9615 (print), 1558-366X (electronic). URL <http://csdl.computer.org/csdl/mags/cs/2015/01/mcs2015010006.pdf>.

[Wha18]

Lucy D. Whalley. *effmass*: An effective mass package. *Journal of Open Source Software*, 3(28):797:1–797:2, August 2018. CODEN ????. ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00797>.

Willner:2017:PPP

[WHG17]

Sven N. Willner, Corinne Hartin, and Robert Gieseke. *pyhector*: a Python interface for the simple climate model Hector. *Journal of Open Source Software*, 2(12):248:1–248:2, April 2017. CODEN ????. ISSN 2475-9066. URL <http://joss.theoj.org/papers/10.21105/joss.00248>.

Westra:2015:PGA

[Wes15]

Erik Westra. *Python geospatial analysis essentials: process, analyze, and display geospatial data using Python libraries and related tools*. Community experience distilled. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78355-389-8, 1-78217-451-6. ume pp. LCCN

[Wie18]

Wiecha:2018:PPP

Peter R. Wiecha. *pyGDM* — a python toolkit for full-field electro-dynamical simulations

- and evolutionary optimization of nanostructures. *Computer Physics Communications*, 233 (??):167–192, December 2018. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S001046551830225X>. Wilson:2002:PBS
- [Wil97a] Frank Willison. Bleeding edge: Python: It’s not just for laughs. *Web Review*, ??(??):??, January 3, 1997. URL http://webreview.com/wr/pub/Willison_Frank. Willison:1997:BEP
- [Wil97b] Gregory V. Wilson. Programmer’s bookshelf: Perusing the bookshelf. *Dr. Dobb’s Journal of Software Tools*, 22(11):125, 127, November 1997. CODEN DDJOEB. ISSN 1044-789X. Wilson:1997:PBP
- [Wil00] Gregory V. Wilson. Programmer’s bookshelf: Python, C++, and other religions. *Dr. Dobb’s Journal of Software Tools*, 25(8):145–147, August 2000. CODEN DDJOEB. ISSN 1044-789X. Wilson:2000:PBP
- [Wil01] Gregory V. Wilson. Programmer’s bookshelf: Time warps. *Dr. Dobb’s Journal of Software Tools*, 26(2):159–160, February 2001. CODEN DDJOEB. ISSN 1044-789X. URL <http://www.ddj.com/>. Wilson:2001:PBT
- [Wil05] Greg Wilson. *Data crunching: solve everyday problems using Java, Python and more*. The pragmatic programmers. Pragmatic Bookshelf, Raleigh, NC, USA, 2005. ISBN 0-9745140-7-1. viii + 193 pp. LCCN QA63 .W55 2005. Wilson:2005:DCS
- [Wim12] M. Wimmer. Algorithm 923: Efficient numerical computation of the Pfaffian for dense and banded skew-symmetric matrices. *ACM Transactions on Mathematical Software*, 38(4):30:1–30:17, August 2012. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). Wimmer:2012:AEN
- [Wit15] Peter Wittek. Algorithm 950: Ncpol2sdpa — sparse semidefinite programming relaxations for polynomial optimization problems of noncommuting variables. *ACM Transactions on Mathematical Software*, 41(3):21:1–21:12, June 2015. CODEN ACMSCU. Wittek:2015:ANS

- ISSN 0098-3500 (print), 1557-7295 (electronic).
- [Wit21] **Witherden:2021:PPP** Freddie D. Witherden. Python at petascale with PyFR or: How I learned to stop worrying and love the snake. *Computing in Science and Engineering*, 23(4):29–37, July/August 2021. CODEN CSENFA. ISSN 1521-9615 (print), 1558-366X (electronic).
- [WM21] **Wilkinson:2021:EPM** Collin J. Wilkinson and John C. Mauro. `Explorer.py`: Mapping the energy landscapes of complex materials. *SoftwareX*, 14(??):??, June 2021. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021000285>.
- [WMA12] **Wilbers:2012:IJT** Ilmar M. Wilbers, Kent-Andre Mardal, and Martin S. Alnæs. Instant: just-in-time compilation of C/C++ in Python. In Logg et al. [LMW12], pages 257–272. CODEN LNCSA6. ISBN 3-642-23098-9 (print), 3-642-23099-7 (e-book). ISSN 1439-7358. LCCN ????? URL http://link.springer.com/content/pdf/10.1007/978-3-642-23099-8_14. The software developed by the FEniCS Project is free for all to use and modify (licensed under the GNU (L)GPL), and so is this book.
- [WMA⁺22] **Wiecha:2022:PNF** Peter R. Wiecha, Clément Majorel, Arnaud Arbouet, Adelin Patoux, Yoann Brûlé, Gérard Colas des Francs, and Christian Girard. “pyGDM” — new functionalities and major improvements to the Python toolkit for nano-optics full-field simulations. *Computer Physics Communications*, 270(??):Article 108142, January 2022. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S001046552100254X>.
- [WMM18] **Wilkinson:2018:RPC** Collin J. Wilkinson, Yihong Z. Mauro, and John C. Mauro. `RelaxPy`: Python code for modeling of glass relaxation behavior. *SoftwareX*, 7(??):245–254, January/June 2018. CODEN ????? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711018301146>.
- [WO14] **Williamson:2014:PPP** Todd Williamson and Ronald A. Olsson. PySy: a Python package for enhanced concurrent programming. *Concurrency and Computation: Practice and Experience*, 26(2):309–335, February 2014. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).

- [WPM⁺20] **Weise:2020:PSU**
Konstantin Weise, Lucas Poßner, Erik Müller, Richard Gast, and Thomas R. Knösche. **Pygpc**: a sensitivity and uncertainty analysis toolbox for Python. *SoftwareX*, 11(?):Article 100450, January/June 2020. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020300078>.
- [WRBT21] **Walter:2021:MML**
Vivien Walter, Céline Ruscher, Olivier Benzerara, and Fabrice Thalmann. **MLPA**: a machine learning-assisted Python module to study phase-specific events in lipid membranes. *Journal of Computational Chemistry*, 42(13):930–943, May 15, 2021. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).
- [Wu13] **Wu:2013:HSC**
Youfeng Wu. HW/SW co-designed acceleration of dynamic languages. *ACM SIGPLAN Notices*, 48(5):1–2, May 2013. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- [WV22] **Wittreich:2022:PGA**
Gerhard R. Wittreich and Dionisios G. Vlachos. Python Group Additivity (**pGrAdd**) software for estimating species thermochemical properties. *Computer Physics Communications*, 273(?):Article 108277, April 2022. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465521003891>.
- [WvA96] **Watters:1996:IPP**
Aaron Watters, Guido van Rossum, and James C. Ahlstrom. *Internet programming with Python*. M&T Books, M&T Publishing, Inc., 501 Galveston Drive, Redwood City, CA 94063, USA, 1996. ISBN 1-55851-484-8. xviii + 477 pp. LCCN QA76.73.P98 W38 1996. US\$34.95. URL <http://www.fsbassociates.com/books/python.htm>.
- [WX18] **Wainer:2018:CEP**
Jacques Wainer and Eduardo C. Xavier. A controlled experiment on Python vs C for an introductory programming course: Students’ outcomes. *ACM Transactions on Computing Education*, 18(3):12:1–12:??, September 2018. CODEN ???? ISSN 1946-6226.
- [WZ18] **Willcox:2018:PPI**
Donald E. Willcox and Michael Zingale. **pynucastro**: an interface to nuclear reaction rates and code generator for reaction network equations. *Journal of Open Source Software*, 3(23):588:1–588:3, March 2018. CODEN ???? ISSN 2475-9066.

- URL <http://joss.theoj.org/papers/10.21105/joss.00588>.
- [XDR21] Yihui Xie, Christophe Dervieux, and Emily Riederer. *R Markdown Cookbook*. The R series. Chapman and Hall/CRC, Boca Raton, FL, USA, 2021. ISBN 0-367-56382-7 (hardcover), 0-367-56383-5 (paperback), 1-00-029080-8 (e-book), 1-00-029084-0 (Mobipocket e-book), 1-00-029088-3 (e-book), 1-00-309747-2 (e-book). xxix + 329 pp. LCCN QA276.45.R3 X54 2021.
- [XL18] Yang Xu and Xiao-Chun Luo. PyPathway: Python package for biological network analysis and visualization. *Journal of Computational Biology*, 25(5):499–504, May 2018. CODEN JCOBEM. ISSN 1066-5277 (print), 1557-8666 (electronic). URL <https://www.liebertpub.com/doi/abs/10.1089/cmb.2017.0199>; <https://www.liebertpub.com/doi/pdf/10.1089/cmb.2017.0199>. [YFD98]
- [XMW10] Xiao-Qin Xia, Michael McClelland, and Yipeng Wang. Code snippet: PypeR, a Python package for using R in Python. *Journal of Statistical Software*, 35(CS-2):??, July 2010. CODEN JSSOBK. ISSN 1548-7660. URL <http://www.jstatsoft.org/v35/c02>.
- [Yan14] Yuxing Yan. *Python for finance: build real-life Python applications for quantitative finance and financial engineering*. Community experience distilled. Packt Publishing, Birmingham, UK, 2014. ISBN 1-78328-438-2, 1-78328-437-4. ix + 386 pp. LCCN QA76.73.P98 Y36 2014.
- [Yes15] Semen O. Yesylevskyy. Software news and updates: Pteros 2.0: Evolution of the fast parallel molecular analysis library for C++ and Python. *Journal of Computational Chemistry*, 36(19):1480–1488, July 15, 2015. CODEN JCCHDD. ISSN 0192-8651 (print), 1096-987X (electronic).
- [YH21] Zhenfei Yuan and Taizhong Hu. pyvine: The Python package for regular vine copula modeling, sampling and testing. *Communications in*

- Mathematics and Statistics*, 9 (1):53–86, March 2021. CODEN ???? ISSN 2194-6701 (print), 2194-671X (electronic). URL <http://link.springer.com/article/10.1007/s40304-019-00195-2>. [You08]
- Yang:2016:PDI**
- [YHA⁺16] Jean Yang, Travis Hance, Thomas H. Austin, Armando Solar-Lezama, Cormac Flanagan, and Stephen Chong. Precise, dynamic information flow for database-backed applications. *ACM SIGPLAN Notices*, 51(6):631–647, June 2016. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- Yang:2022:MPF**
- [YHX22] Yilin Yang, Tianxing He, and Baowen Xu. Mining Python fix patterns via analyzing fine-grained source code changes. *Empirical Software Engineering*, 27(2):??, March 2022. CODEN ESENFV. ISSN 1382-3256 (print), 1573-7616 (electronic). URL <https://link.springer.com/article/10.1007/s10664-021-10087-1>.
- Yadav:2019:PPB**
- [YKKD19] Vinay Yadav, Subhankar Karmakar, Pradip P. Kalbar, and A. K. Dikshit. PyTOPS: a Python based tool for TOPSIS. *SoftwareX*, 9(??):217–222, January/June 2019. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711018302279>.
- Younker:2008:FAP**
- Jeff Younker. *Foundations of agile Python development: [Python, agile project methods, and a comprehensive open source tool chain!]*. The expert’s voice in open source. Apress, Berkeley, CA, USA, 2008. ISBN 1-59059-981-0. xxi + 393 pp. LCCN QA76.73.P98.
- Yang:2016:VAV**
- [YPB16] Yuting Yang, Sam Prestwood, and Connelly Barnes. Viz-Gen: accelerating visual computing prototypes in dynamic languages. *ACM Transactions on Graphics*, 35(6):206:1–206:??, November 2016. CODEN ATGRDF. ISSN 0730-0301 (print), 1557-7368 (electronic).
- Zacccone:2015:PPP**
- [Zac15] Giancarlo Zacccone. *Python parallel programming cookbook: master efficient parallel programming to build powerful applications using Python*. Quick answers to common problems. Packt Publishing, Birmingham, UK, 2015. ISBN 1-78528-958-6, 1-78528-672-2. 286 (est.) pp. LCCN QA76.73.P98. URL <http://proquest.safaribooksonline.com/?fpi=9781785289583>.

- [ZAPS20] **Zdybal:2020:PPS**
 Kamila Zdybał, Elizabeth Armstrong, Alessandro Parente, and James C. Sutherland. PCAfold: Python software to generate, analyze and improve PCA-derived low-dimensional manifolds. *SoftwareX*, 12(??):Article 100630, July/December 2020. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711020303435>.
- [ZC20] **Zhang:2020:GPP**
 Yifei Zhang and Jia Cao. GSimPy: a Python package for measuring group similarity. *SoftwareX*, 12(??):Article 100526, July/December 2020. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711019303590>.
- [ZGL20] **Zhao:2020:ITC**
 Yafei Zhao, Paolo Vincenzo Genovese, and Zhixing Li. Intelligent thermal comfort controlling system for buildings based on IoT and AI. *Future Internet*, 12(2):30, February 10, 2020. CODEN ???? ISSN 1999-5903. URL <https://www.mdpi.com/1999-5903/12/2/30>.
- [Zho97] **Zhou:1997:CCJ**
 Ling Zhou. A comparison of C++, Java and Python. Thesis (m.s.), Department of Computer Science, Texas A&M University, College Station, TX, USA, 1997. vi + 44 pp.
- [Zia06] **Ziade:2006:PP**
 Tarek Ziadé. *Programmation Python*. Eyrolles, Paris, France, 2006. ISBN 2-212-11677-2. xxxviii + 537 pp. LCCN ????
- [Zie19a] **Ziegenhagen:2019:CLP**
 Uwe Ziegenhagen. Combining L^AT_EX with Python. *TUGboat*, 40(2):126–128, ???? 2019. CODEN ???? ISSN 0896-3207. URL <https://tug.org/TUGboat/tb40-2/tb125ziegenhagen-python.pdf>.
- [Zie19b] **Zienert:2019:CTP**
 Tilo Zienert. cp-tools: a Python library for predicting heat capacity of crystalline substances. *SoftwareX*, 9(??):244–247, January/June 2019. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711018301791>.
- [ZKB+08] **Ziade:2008:EPP**
 Tarek Ziadé, Paul Kennedy, Shannon Behrens, Wendy Langer, and Siddharth Mangarole. *Expert Python programming: learn best practices to designing, coding, and distributing your Python software*. Packt Publishing, Birmingham, UK, 2008. ISBN 1-

- 84719-494-X, 1-84719-495-8 (e-book). LCCN A76.73.P98 Z53 2008. URL <http://proquest.safaribooksonline.com/9781847194947>. [ZMS18]
- Zia:2020:PPH**
- [ZL20] Haseeb Zia and Brice Lecampion. PyFrac: a planar 3D hydraulic fracture simulator. *Computer Physics Communications*, 255(?):Article 107368, October 2020. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0010465520301582>. [ZRK21]
- Zhang:2014:AIO**
- [ZLBF14] Wei Zhang, Per Larsen, Stefan Brunthaler, and Michael Franz. Accelerating iterators in optimizing AST interpreters. *ACM SIGPLAN Notices*, 49(10):727–743, October 2014. CODEN SINODQ. ISSN 0362-1340 (print), 1523-2867 (print), 1558-1160 (electronic).
- Zerouali:2021:UJP**
- [ZMD21] Ahmed Zerouali, Tom Mens, and Coen De Roover. On the usage of *javascript*, *Python* and *Ruby* packages in Docker Hub images. *Science of Computer Programming*, 207(?):??, July 1, 2021. CODEN SCPGD4. ISSN 0167-6423 (print), 1872-7964 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167642321000460>.
- Zhu:2018:OPL**
- Minjie Zhu, Frank McKenna, and Michael H. Scott. *OpenSeesPy*: Python library for the *OpenSees* finite element framework. *SoftwareX*, 7(?):1–5, January/June 2018. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711017300584>.
- Zolotov:2021:PFO**
- Oleg Zolotov, Yulia Romanovskaya, and Maria Knyazeva. *pyFIRI* — a free and open source Python software package of the non-auroral Earth’s lower ionosphere. *SoftwareX*, 16(?):??, December 2021. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021001461>.
- Zampieri:2021:ARA**
- [ZTC+21] Matteo Zampieri, Andrea Toreti, Andrej Ceglar, Pierluca De Palma, Thomas Chatzopoulos, and Melania Michetti. Analysing the resilience of agricultural production systems with *ResiPy*, the Python production resilience estimation package. *SoftwareX*, 15(?):??, July 2021. CODEN ???? ISSN 2352-7110. URL <http://www.sciencedirect.com/science/article/pii/S2352711021000716>.

Zukowski:1997:ISU

- [Zuk97] Monty Zukowski. Implementing a selective undo framework in Python. In Anonymous [Ano97c], pages 69–75. ISBN ????. LCCN ????. URL <http://www.python.org/workshops/1997-10/proceedings/zukowski.html>. ■

Zhang:2019:SSE

- [ZV19] Zhiping Zhang and Jeffrey D. Varner. SEML: a simplified English modeling language for constructing biological models in Julia. *IFAC-PapersOnLine*, 52(26):121–128, 2019. ISSN 2405-8963. URL <https://www.sciencedirect.com/science/article/pii/S2405896319321299>. ■
8th Conference on Foundations of Systems Biology in Engineering FOSBE 2019.

Zhang:2022:QIO

- [ZXZX22] Qiang Zhang, Lei Xu, Xianguyu Zhang, and Baowen Xu. Quantifying the interpretation overhead of Python. *Science of Computer Programming*, 215(??):??, March 1, 2022. CODEN SCPGD4. ISSN 0167-6423 (print), 1872-7964 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0167642321001520>.