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EDITORIAL

The 2015 "State of the Journal" report

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With the inception of SoSyM in 2001, we will this year celebrate its 15th year anniversary! Over the past 14 volumes, SoSyM has published a total of 512 different articles and editorials (145 regular papers, 159 special section papers, 76 theme section papers, 45 editorials, 46 guest editorials, 34 expert voices, 1 industry voice, 4 discussion/overview papers, 2 errata). The journal is doing very well and recently received an Impact Factor of 1.408.

In 2015, SoSyM published 79 articles and editorials (26 regular papers, 42 special section papers, 5 editorials, 6 guest editorials), which included 1580 pages (issues 1 and 2 were doubled in size to reduce the backlog of papers in the online pipeline). For the issues of 2016 Springer has increased again the number of pages per issue from 256 pages in 2015 to 294 pages so that we will publish at least 1176 pages this year. The number of paper downloads from the Springer SoSyM site continues to be higher than the first decade of publication. In the years of 2010 and 2011, the number of downloads were 20,267 and 24,048, respectively. Our most recent statistics from Springer indicate that the 2013 and 2014 volumes received 48,296 and 41,357 downloads, respectively.

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There were 198 submissions to SoSyM during the 2015 calendar year. The submissions included 147 regular papers, 12 special section papers, 36 theme section papers, 2 industry voice submissions, and 1 overview submission. The acceptance rate over the past 12 months has been 21.8 %. There were 21 desk rejects (all from regular submissions), which were returned within 4 days of submission. The average time to final decision (accept and reject) was 145 days.

The past year of SoSyM has been characterized by several changes. We are still very sad about the loss of our dear friend Robert France in February 2015, who was the founder of SoSyM and remained the SoSyM Editor-In-Chief until his passing. Jeff Gray started the demanding job as new Editor-In-Chief for SoSyM in April. Several Editors completed their term of service (Jeff Offutt and Franck Barbier) - we appreciate their help! We also were excited to announce that Timothy Lethbridge was added to the Editorial Board in 2015, joining our other new Editors, Esther Guerra and Yves Le Traon, who started their Editorial Board service in late 2014.

Throughout the 2015 publication cycle, numerous actions were defined and completed as a result of discussions at the 2014 Editorial Board meeting held at MODELS 2014 in Valencia. SoSyM established several new awards, which were presented at MODELS 2015. For the first time, a journal-first option was available in collaboration with MODELS. These two new activities are reported in more detail in the next sections. An effort was also initiated to extend the SoSyM advertisement strategy to make SoSyM more aware to younger researchers and to solicit excellent papers for future submission. Specific actions include the following:

- a new flyer that can be found at http://www.sosym.org/SoSyM-flyer.pdf.

- a new social media presence to distribute announcements of papers and encourage community discussions is being initiated and will be described in the next issue.
- updates to SoSyM's "Aims And Scope" to include new areas of interest (see http://www.sosym.org/, as well as the cover of the printed issue in your hands).

1 SoSyM's 8-year most influential paper awards

Awards are an excellent mechanism to recognize and honor the good work of past authors, while also providing an incentive for future authors to write and submit their papers to SoSyM. At MODELS 2015, SoSyM decided to give two awards for the most influential papers of the last 2^3 years. The selection was based on the ISI citation index among papers published in SoSyM from 2007 to 2014.

The 8-year most influential regular paper award was given to the following authors:

Anne Immonen and Eila Niemelä. Survey of reliability and availability prediction methods from the viewpoint of software architecture. In: Journal on Software and Systems Modeling (SoSyM), Volume 7, Issue 1, pp. 49–65, Springer, February 2008.

It is worth noting that this paper was a survey paper, which SoSyM strongly encourages. The authors identified methods for reliability and availability prediction, together with their shortcomings. They defined a comparison framework that encodes the required characteristics of analysis methods from context, user, method content and evaluation perspectives, which can be used to inform the selection of the best suitable method for architectural analysis.

The 8-year most influential theme section paper award was given to the following authors:

Tom Mens, Gabriele Taentzer, and Olga Runge. Analysing refactoring dependencies using graph transformation. In: Journal on Software and Systems Modeling (SoSyM), Volume 6, Issue 3, pp. 269–285, Springer, September 2007.

This article focuses on the formal foundations of software refactoring through the use of graph transformations. Although graph transformations have been used frequently for formalizing refactorings, the authors considered the problem at a higher level of granularity. The article uses the formal technique of critical pair analysis, encoded in the AGG graph transformation tool, for analyzing transformation dependencies and to incrementally resolve model inconsistencies. The tool is also implemented using the Eclipse Modeling Framework (EMF).

The 2015 MODELS conference in Ottawa was a great venue to announce these two awards and we hope to make this an annual award at future MODELS conferences. More information about the awards can be found at: http://www.sosym.org/awards/.

2 SoSyM's journal-first papers at MODELS 2015

SoSyM is honored and excited that the MODELS 2015 conference hosted the inaugural journal-first papers that were presented in a special conference session. This initiative enables authors of SoSyM articles that have not been presented elsewhere to reach a broader conference audience. At the same time, the journal-first arrangement enriches the conference program with works that may not fit the standard conference format and process. MODELS 2015 featured four articles published during the previous year (from January 2014 through June 2015) that were selected jointly by the Program Chairs and the Editors in Chief. SoSyM looks forward to continuing this arrangement with MODELS in the future. The SoSyM journal-first papers that were presented at MODELS 2015 were the following:

- Alejandro Rago, Claudia Marcos, and J. Andres Diaz-Pace. Identifying duplicate functionality in textual use cases by aligning semantic actions. In: Journal on Software and Systems Modeling (SoSyM), doi:10.1007/s10270-014-0431-3, Springer, 2014.
- Cédric Eichler, Thierry Monteil, Patricia Stolf, Luigi Alfredo Grieco, and Khalil Drira. Enhanced graph rewriting systems for complex software domains. In: Journal on Software and Systems Modeling (SoSyM), doi:10.1007/s10270-014-0433-1, Springer, 2014.
- Matthias Farwick, Christian M. Schweda, Ruth Breu, and Inge Hanschke. A situational method for semi-automated Enterprise Architecture Documentation. In: Journal on Software and Systems Modeling (SoSyM), doi:10.1007/s10270-014-0407-3, Springer, 2014.
- Songzheng Song, Jiexin Zhang, Yang Liu, Mikhail Auguston, Jun Sun, Jin Song Dong, and Tieming Chen. Formalizing and verifying stochastic system architectures using Monterey Phoenix. In: Journal on Software and Systems Modeling (SoSyM), doi:10.1007/s10270-014-0411-7, Springer, 2014.

More information on these awards can be found at http://www.sosym.org/awards/.

3 Reviewers in 2015

Below is a list of those who reviewed one or more papers for the journal in the last year. The complete list of reviewers can also be found on our website http://www.sosym.org/people/. We appreciate all of the help that the reviewers provided in service to the modeling community!

Silvia Abrahao, Mathieu Acher, Bernhard Aichernig, Yamine Ait Ameur, Shaukat Ali, Joao Paulo Almeida, Jesus Almendros, Vander Alves, Eric Andonoff, Etienne

Andre, Sven Apel, Stefan Appel, Ludovic Apvrille, Renata Araujo, Mohsen Asadi, Nesa Asoudeh, Colin Atkinson, Christian Attiogbe, Paris Avgeriou, Thomas Baar, Mira Balaban, Olivier Barais, Franck Barbier, Luciano Baresi, Luciano Baresi, Joseph Barjis, Judith Barrios Albornoz, María Bastarrica, Don Batory, Bernhard Bauer, Anne Baumgraß, Andreas Bayha, Coskun Bayrak, Olivier Beaudoux, Steffen Becker, Kai Beckmann, Saeed Behnam, Nicolas Belloir, Nikola Benes, Saddek Bensalem, Thorsten Berger, Hugues Bersini, Danilo Beuche, Ghassan Beydoun, Xavier Blanc, Arnaud Blouin, Dominique Blouin, Conrad Bock, Eric Bodden, Karsten Boehm, Anja Bog, Narasimha Bolloju, Andre Bondi, Rodrigo Bonifácio, Pruet Boonma, Paolo Bottoni, Marco Brambilla, Lars Brehm, Ruth Breu, Fernando Brito e Abreu, Fabian Brosig, Achim Brucker, Jean-Michel Bruel, Hugo Brunelière, Andreas Brunnert, Peter Buchholz, Didier Buchs, Lubomir Bulej, Artur Caetano, Radu Calinescu, Javier Luis Canovas Izquierdo, Claudia Cappelli, Eric Cariou, Josep Carmona, Corine Cauvet, Mohammad Chami, Anis Charfi, Elder Cirilo, Robert Clarisó, Peter Clarke, Siobhan Clarke, Sholom Cohen, Rolland Colette, Philippe Collet, Christian Colombo, Benoit Combemale, Isabelle Comyn-Wattiau, Kendra Cooper, Maxime Cordy, Vittorio Cortellessa, Gabriel Costa Silva, Andrea D'Ambrogio, Andrea D'Ambrogio, Akshay Dabholkar, Judith Dahmann, Fabiano Dalpiaz, Ferruccio Damiani, Antonina Dattolo, Nancy Day, Sergio de Cesare, Juan de Lara, Julien De Antoni, Patrick Delfmann, Serge Demeyer, Andreas Demuth, Mahdi Derakhshanmanesh, Chiara Di Francescomarino, Davide Di Ruscio, Arilo Dias-Neto, Oscar Díaz, Juergen Dingel, Zinovy Diskin, Julio do Prado Leite, Joerg Doerr, Jose Javier Dolado, Boudewijn Dongen, Heiko Dörr, Hubert Dubois, Cédric Dumoulin, Ali Ebnenasir, Marina Egea, Alexander Egyed, Holger Eichelberger, Mathias Ekstedt, Gregor Engels, Romina Eramo, Rik Eshuis, Sergio España, Huascar Espinoza, Dirk Fahland, Alessandro Fantechi, Michael Fellmann, Eduardo Fernandez, Jennifer Ferreira, Peter Fettke, Kathrin Figl, Hans-Georg Fill, Francois Fouquet, Jose Galindo, Luciano García-Bañuelos, Ignacio García-Rodríguez, Alessandro Garcia, Pierre-Loic Garoche, Christophe Gaston, Verena Geist, Marclla Genero, Gonzalo Génova, Sebastien Gerard, Johny Ghattas, Aditya Ghose, Holger Giese, Asif Gill, Paolo Giorgini, Martin Glinz, Christophe Gnaho, Claude Godart, Sebastian Goetz, Cesar Gonzalez-Perez, Jaap Gordijn, Guido Governatori, Jens Grabowski, Vincenzo Grassi, Jeff Gray, Joel Greenyer, Marco Gribaudo, Iris Groher, Hans-Gerhard Gross, Martin Große-Rhode, Roland Groz, Alicia Grubb, Volker Gruhn, Nicola Guarino, Esther Guerra, Carlos Guerrero, Pablo Guerrero, Giancarlo Guizzardi, Dilian Gurov, Terry Halpin, Nabil Hameurlain, Chihab Hanachi, Jo Hannay, Alois Haselboeck, Wilhelm Hasselbring, Oystein Haugen, Klaus Havelund, Regina Hebig, Monika Heiner, Maritta Heisel, Constance Heitmeyer, Rogardt Heldal, Steffen Helke, Michiel Helvensteijn, Graham Hemingway, Hadi Hemmati, Stefan Henkler, Frank Hermann, Peter Herrmann, Soichiro Hidaka, Thomas Hildebrandt, Christoph Hilken, Rich Hilliard, Mike Hinchey, Thai Son Hoang, Berthold Hoffmann, Dominik Holling, Ta'id Holmes, Jennifer Horkoff, Jennifer Horkoff, Akos Horvath, LiGuo Huang, Marc-Philippe Huget, Benjamin Hummel, Mauro Iacono, Alexei Iliasov, Stefan Jablonski, Pooyan Jamshidi, Buchan Jim, Zhi Jin, Paul Johannesson, Jan Juerjens, Ivan Jureta, Monika Kaczmarek, Maryam Kamali, Erik Kamsties, Gabor Karsai, Christian Kästner, Rick Kazman, Steven Kelly, Elisa Kendall, Andrew Kennedy, Joerg Kienzle, Joe Kiniry, Marite Kirikova, Cornel Klein, Alexander Knapp, William Knottenbelt, Manfred Koethe, Sahar Kokaly, Dimitrios Kolovos, Barbara König, Máté Kovács, Tamas Kovacshazy, Stefan Kowalewski, Anne Koziolek, Frank Alexander Kraemer, Lars Michael Kristensen, John Krogstie, Thomas Kuhn, Marcello La Rosa, Philippe Lahire, Ivan Lanese, Frédéric Lang, Kevin Lano, Alexei Lapouchnian, Ralf Laue, Axel Legay, Henrik Leopold, Isaac Lera, Tihamer Levendovszky, Nicole Levy, Bixin Li, Nan Li, Mikael Lindvall, Lin Liu, Xuanzhe Liu, Malte Lochau, Irina Lomazova, Roberto Lopez, Graham Low, Mass Soldal Lund, Xiaoxing Ma, Nuno Macedo, Patrick Maeder, Frédéric Mallet, Shahar Maoz, Andrea Marin, Julio Marino, Stefano Marrone, Célia Martinie, Aaron Massey, Kovács Máté, Reza Matinnejad, Florian Matthes, Raimundas Matulevicius, John D. McGregor, Julio Medina, Karl Meinke, Jan Mendling, Pedro Merino Gómez, Marjan Mernik, Jose Merseguer, Andreas Metzger, Zoltán Micskei, Mark Minas, Antoine Miné, Pedro Molina, Lionel Montrieux, Sandro Morasca, Brice Morin, Sebastien Mosser, Sébastien Mosser, Pieter Mosterman, Jean-Marie Mottu, Haralambos Mouratidis, Chokri Mraidha, Henry Muccini, Joerg Mueller, Johannes Müller, Pierre-Alain Muller, Radu Muschevici, Gunter Mussbacher, Bela Mutschler, Manoj Nambiar, Shiva Nejati, Dejan Nickovic, Brian Nielsen, Jens Nimis, Gethin Norman, Selmin Nurcan, Markus Nüttgens, Ileana Ober, Iulian Ober, Peter Ölveczky, Rasha Osman, Chun Ouyang, Sietse Overbeek, Gordon J. Pace, Julia Padberg, Richard Paige, Fernando Parreiras, Roberto Passerone, Leonardo Passos, Oscar Pastor, Fabrizio Pastore, Vicente Pelechano, Jan Peleska, Patrizio Pelliccione, Xin Peng, Juan Perez, Gilles Perrouin, Kai Petersen, Dorina Petriu, Robert Pettit, Fabien Peureux, Mauro Pezze, Alfonso Pierantonio, Geert Poels, Meikel Poess, Richard Pohl, Artem Polyvyanyy, Claudia Pons, Wolfgang Pree, Christian Prehofer, Jose Proenca, Rick Rabiser, Franco Raimondi, Isidro Ramos, Christoph Rathfelder, Andreas Rausch, Anders Ravn, Henrique Rebelo, Bendraou Reda, David Redlich, Gil Regev, Björn Regnell, Hajo A. Reijers, Iris Reinhartz-Berger, Philipp Reinicke, Mark-Oliver Reiser, Arend Rensink, Manuel Resinas, Achim Rettberg, Ralf Reussner, Márcio Ribeiro, Elvinia Riccobene,

Matthias Riebisch, Juergen Rilling, Stefani Rinderle-Ma, Jan Ringert, Laurent Rioux, Peter Rittgen, Andreas Rogge-Solti, Mauno Rönkkö, Antonio Rosado da Cruz, Louis Rose, Matteo Rossi, Cecilia Rubira, Francisco Ruiz, Adrian Rutle, Gunter Saake, Shazia Sadiq, Neda Saeedloei, Tomer Sagi, Houari Sahraoui, Hossein Saiedian, Rick Salay, Jesus Sánchez-Cuadrado, Ina Schaefer, Bernhard Schaetz, Ansgar Scherp, Hannes Schlieter, Holger Schlingloff, Rainer Schmidt, Pierre-Yves Schobbens, Eelco Scholte, Stefan Schöning, Michael Schulze, Sandro Schulze, Johann Schumann, Dennis Schunselaar, Andy Schürr, Fredrik Seehusen, Sergio Segura, Bran Selic, Sagar Sen, Traian Serbanuta, Bonita Sharif, Jocelyn Simmonds, John Slaby, Graeme Smith, Mathias Soeken, Pnina Soffer, Siavash Soleimani-fard, Hui Song, Maria Spichkova, Miroslaw Staron, Friedrich Steimann, Friedrich Steimann, Matthew Stephan, Harald Störrle, Detlef Streitferdt, Vanessa Stricker, Gerson Sunye, Eugene Syriani, Gabriele Taentzer, Jérémie Tatibouet, Bedir Tekinerdogan, Maurice ter Beek, Stephan Thesing, Nigel Thomas, Thomas Thuem, Matthias Tichy, Massimo Tisi, Massimo Tivoli, Giovanni Toffetti, Andreas Tolk, Muhammad Torabi Dashti, Mirco Tribastone, Catia Trubiani, Salvador Trujillo, Petr Tuma, Mark van den Brand, Wil M.P. van der Aalst, Frank van der Linden, Tijs van der Storm, Pieter Van Gorp, Andre van Hoorn, Jean Vanderdonckt, Juan Manuel Vara, Daniel Varro, Gergely Varró, Clark Verbrugge, Marco Vieira, Karina Villela, Thomas Vogel, Bernhard Volz, Gerd Wagner, Neil Walkinshaw, Shuai Wang, Barbara Weber, Matthias Weidlich, Hans Weigand, Thomas Weigert, Tim Weilkiens, Alexander Wert, Mathias Weske, Bernhard Westfechtel, Michael Whalen, Jules White, Matthias Wieland, Roel J Wieringa, Manuel Wimmer, Andreas Winter, Kirsten Winter, Katinka Wolter, Uwe Wolter, Jim Woodcock, Murray Woodside, Yijun Yu, Tao Yue, Eduardo Zambon, Nicola Zannone, Pamela Zave, Jelena Zdravkovic, Uwe Zdun, Jesper Zedlitz, Xiaorui Zhang, Jianjun Zhao, Yuting Zhao, Xiaoyun Zhu, Tewfik Ziadi, Alfred Zimmermann, Dieter Zöbel, Steffen Zschaler, and Mohammad Zulkernine.

4 Content of this issue

This issue includes two Industry Voice and eight regular papers. Through the Industry Voice paper, SoSyM invites those who have hands-on experience in applying models in industrial contexts to share their results. The Industry Voice papers report about new insights, unique challenges and their solutions, and improved methods and tools from an industrial perspective. While working with the authors, Justyna Zander and Pieter Mosterman, we discovered that there was so much to say that we felt it necessary to split into two papers:

- "Cyber-physical systems challenges: A needs analysis for collaborating embedded software systems" by Justyna Zander and Pieter Mosterman.
- "Industry 4.0 as a Cyber-Physical System study" by Justyna Zander and Pieter Mosterman.

The regular papers are:

- "Systematic literature review of the objectives, techniques, kinds, and architectures of models at runtime" by Michael Szvetits and Uwe Zdun.
- "SAMM: an architecture modeling methodology for ship command and control systems" by Zhiqiang Fan, Tao Yue, and Li Zhang.
- "Formalizing and applying compliance patterns for business process compliance" by Amal Elgammal, Oktay Turetken, Willem-Jan van den Heuvel, and Mike Papazoglou.
- "A profile and tool for modelling safety information with design information in SysML" by Geoffrey Biggs, Takeshi Sakamoto, and Tetsuo Kotoku.
- "An executable formal semantics for UML-RT" by Ernesto Posse and Jürgen Dingel.
- "Evaluating the appropriateness of the BPMN 2.0 standard for modeling service choreographies: using an extended quality framework" by Mario Cortes-Cornax, Sophie Dupuy-Chessa, Dominique Rieu, and Nadine Mandran.
- "Goal-oriented modeling and verification of feature-oriented product lines" by Mohsen Asadi, Gerd Groener, Bardia Mohabbati, and Dragan Gasevic.
- "Synthesizing object life cycles from business process models" by Rik Eshuis and Pieter Van Gorp.

We are confident that these papers will increase the knowledge about modeling in industry and help to bring new ideas to the modeling community.