

Dimitris Papadias Donghui Zhang
George Kollios (Eds.)

Advances in Spatial and Temporal Databases

10th International Symposium, SSTD 2007
Boston, MA, USA, July 16-18, 2007
Proceedings

 Springer

Table of Contents

Continuous Monitoring of Exclusive Closest Pairs	1
<i>Leong Hou U, Nikos Mamoulis, and Man Lung Yiu</i>	
Continuous Evaluation of Fastest Path Queries on Road Networks	20
<i>Chia-Chen Lee, Yi-Hung Wu, and Arbee L.P. Chen</i>	
Continuous Medoid Queries over Moving Objects	38
<i>Stavros Papadopoulos, Dimitris Sacharidis, and Kyriakos Mouratidis</i>	
Efficient Index Support for View-Dependent Queries on CFD Data	57
<i>Christoph Brochhaus and Thomas Seidl</i>	
Generalizing the Optimality of Multi-step k -Nearest Neighbor Query Processing	75
<i>Hans-Peter Kriegel, Peer Kröger, Peter Kunath, and Matthias Renz</i>	
S-GRID: A Versatile Approach to Efficient Query Processing in Spatial Networks	93
<i>Xuegang Huang, Christian S. Jensen, Hua Lu, and Simonas Šaltenis</i>	
Efficiently Mining Regional Outliers in Spatial Data	112
<i>Richard Frank, Wen Jin, and Martin Ester</i>	
A Two Round Reporting Approach to Energy Efficient Interpolation of Sensor Fields	130
<i>Brian Harrington and Yan Huang</i>	
Online Amnesic Summarization of Streaming Locations	148
<i>Michalis Potamias, Kostas Patroumpas, and Timos Sellis</i>	
Spatial Partition Graphs: A Graph Theoretic Model of Maps	167
<i>Mark McKenney and Markus Schneider</i>	
Geographic Ontology Matching with IG-MATCH	185
<i>Guillermo Nudelman Hess, Cirano Iochpe, and Silvana Castano</i>	
Local Topological Relationships for Complex Regions	203
<i>Mark McKenney, Alejandro Pauly, Reasey Praing, and Markus Schneider</i>	
MOBIHIDE: A Mobile Peer-to-Peer System for Anonymous Location-Based Queries	221
<i>Gabriel Ghinita, Panos Kalnis, and Spiros Skiadopoulos</i>	

Blind Evaluation of Nearest Neighbor Queries Using Space Transformation to Preserve Location Privacy	239
<i>Ali Khoshgozaran and Cyrus Shahabi</i>	
Enabling Private Continuous Queries for Revealed User Locations	258
<i>Chi-Yin Chow and Mohamed F. Mokbel</i>	
Computing a k -Route over Uncertain Geographical Data	276
<i>Eliyahu Safra, Yaron Kanza, Nir Dolev, Yehoshua Sagiv, and Yerach Doytsher</i>	
Querying Objects Modeled by Arbitrary Probability Distributions	294
<i>Christian Böhm, Peter Kunath, Alexey Pryakhin, and Matthias Schubert</i>	
Invisible Graffiti on Your Buildings: Blind and Squaring-Proof Watermarking of Geographical Databases	312
<i>Julien Lafaye, Jean Béguec, David Gross-Amblard, and Anne Ruas</i>	
Transformation of Continuous Aggregation Join Queries over Data Streams	330
<i>Tri Minh Tran and Byung Suk Lee</i>	
Continuous Constraint Query Evaluation for Spatiotemporal Streams . . .	348
<i>Marios Hadjieleftheriou, Nikos Mamoulis, and Yufei Tao</i>	
Collaborative Spatial Data Sharing Among Mobile Lightweight Devices	366
<i>Zhiyong Huang, Christian S. Jensen, Hua Lu, and Beng Chin Ooi</i>	
A Study for the Parameters of a Distributed Framework That Handles Spatial Areas	385
<i>Verena Kantere and Timos Sellis</i>	
Distributed, Concurrent Range Monitoring of Spatial-Network Constrained Mobile Objects	403
<i>Hua Lu, Zhiyong Huang, Christian S. Jensen, and Linhao Xu</i>	
Compression of Digital Road Networks	423
<i>Jonghyun Suh, Sungwon Jung, Martin Pfeifle, Khoa T. Vo, Marcus Oswald, and Gerhard Reinelt</i>	
Traffic Density-Based Discovery of Hot Routes in Road Networks	441
<i>Xiaolei Li, Jiawei Han, Jae-Gil Lee, and Hector Gonzalez</i>	
Spatio-temporal Network Databases and Routing Algorithms: A Summary of Results	460
<i>Betsy George, Sangho Kim, and Shashi Shekhar</i>	
Author Index	479