

Table of Contents

A Conceptual Data Model for Trajectory Data Mining	1
<i>Vania Bogorny, Carlos Alberto Heuser, and Luis Otavio Alvares</i>	
Time-Geographic Density Estimation for Moving Point Objects	16
<i>Joni A. Downs</i>	
Microtheories for Spatial Data Infrastructures – Accounting for Diversity of Local Conceptualizations at a Global Level	27
<i>Stephanie Duce and Krzysztof Janowicz</i>	
The Family of Conceptual Neighborhood Graphs for Region-Region Relations	42
<i>Max J. Egenhofer</i>	
Detecting Road Intersections from GPS Traces	56
<i>Alireza Fathi and John Krumm</i>	
Semantic Referencing – Determining Context Weights for Similarity Measurement	70
<i>Krzysztof Janowicz, Benjamin Adams, and Martin Raubal</i>	
User-Centric Time-Distance Representation of Road Networks	85
<i>Christian Kaiser, Fergal Walsh, Carson J.Q. Farmer, and Alexei Pozdnoukhov</i>	
Efficient Data Collection and Event Boundary Detection in Wireless Sensor Networks Using Tiny Models	100
<i>Kraig King and Silvia Nittel</i>	
Combining Synchronous and Asynchronous Collaboration within 3D City Models	115
<i>Jan Klimke and Jürgen Döllner</i>	
Cognitive Invariants of Geographic Event Conceptualization: What Matters and What Refines?	130
<i>Alexander Klippel, Rui Li, Frank Hardisty, and Chris Weaver</i>	
A Visibility and Spatial Constraint-Based Approach for Geopositioning	145
<i>Jean-Marie Le Yaouanc, Éric Sauz, and Christophe Claramunt</i>	
Area-Preserving Subdivision Schematization	160
<i>Wouter Meulemans, André van Renssen, and Bettina Speckmann</i>	

Periodic Multi-labeling of Public Transit Lines.....	175
<i>Valentin Polishchuk and Arto Vihavainen</i>	
Comparing the Effectiveness of GPS-Enhanced Voice Guidance for Pedestrians with Metric- and Landmark-Based Instruction Sets	189
<i>Karl Rehr, Elisabeth Häusler, and Sven Leitinger</i>	
A Mismatch Description Language for Conceptual Schema Mapping and Its Cartographic Representation	204
<i>Thorsten Reitz</i>	
Detecting Change in Snapshot Sequences	219
<i>Mingzheng Shi and Stephan Winter</i>	
Multi-source Toponym Data Integration and Mediation for a Meta-Gazetteer Service	234
<i>Philip D. Smart, Christopher B. Jones, and Florian A. Twaroch</i>	
Qualitative Change to 3-Valued Regions	249
<i>Matt Duckham, John Stell, Maria Vasardani, and Michael Worboys</i>	
Collaborative Generalisation: Formalisation of Generalisation Knowledge to Orchestrate Different Cartographic Generalisation Processes	264
<i>Guillaume Touya, Cécile Duchêne, and Anne Ruas</i>	
Automatic Extraction of Destinations, Origins and Route Parts from Human Generated Route Directions	279
<i>Xiao Zhang, Prasenjit Mitra, Alexander Klippel, and Alan MacEachren</i>	
Visual Exploration of Eye Movement Data Using the Space-Time-Cube	295
<i>Xia Li, Arzu Çöltekin, and Menno-Jan Kraak</i>	
5D Data Modelling: Full Integration of 2D/3D Space, Time and Scale Dimensions.....	310
<i>Peter van Oosterom and Jantien Stoter</i>	
Author Index	325