
Contents

1 Spatial Data on the Web: Issues and Challenges <i>Alberto Belussi, Barbara Catania, Eliseo Clementini, Elena Ferrari</i>	1
------------------------------------------------------------------------------------------------------------------------------------------------	---

Part I Models for Representing Spatial Semistructured, Multiresolution, and Multiscale Data

2 GeoMTGM: A Graphical Data Model for Semistructured, Geographical, and Temporal Data <i>Carlo Combi, Sara Migliorini, Barbara Oliboni, Alberto Belussi</i>	15
3 Out-of-core Multiresolution Terrain Modeling <i>Emanuele Danovaro, Leila De Floriani, Enrico Puppo, Hanan Samet</i>	43
4 Progressive Techniques for Efficient Vector Map Data Transmission: An Overview <i>Michela Bertolotto</i>	65
5 Model Generalization and Methods for Effective Query Processing and Visualization in a Web Service/Client Architecture <i>Marian de Vries, Peter van Oosterom</i>	85

Part II Integration of Spatial Data Sources

6 Automated Geographical Information Fusion and Ontology Alignment <i>Matt Duckham, Mike Worboys</i>	109
7 A Quality-enabled Spatial Integration System <i>Omar Boucelma, Mehdi Essid, Yassine Lassoued</i>	133

**8 Using Qualitative Information in Query Processing over
Multiresolution Maps**
Paola Podestà, Barbara Catania, Alberto Belussi 159

Part III Spatial Data Protection

9 Access Control Systems for Geospatial Data and Applications
Maria Luisa Damiani, Elisa Bertino 189

**10 Secure Outsourcing of Geographical Data Over the Web: Techniques
and Architectures**
Barbara Carminati, Elena Ferrari 215

11 Information Hiding for Spatial and Geographical Data
Maria Calagna, Luigi V. Mancini 235

Part IV Innovative Applications for Mobile Devices

**12 Geographical Data Visualization on Mobile Devices for User's
Navigation and Decision Support Activities**
Stefano Burigat, Luca Chittaro 261

13 Tracking of Moving Objects with Accuracy Guarantees
Alminas Čivilis, Christian S. Jensen, Stardas Pakalnis 285

Index 311



<http://www.springer.com/978-3-540-69877-7>

Spatial Data on the Web

Modeling and Management

Belussi, A.; Catania, B.; Clementini, E.; Ferrari, E. (Eds.)

2007, XII, 314 p. 111 illus., Hardcover

ISBN: 978-3-540-69877-7