

Table of Contents

Shape and Spatial Relations 1

A Study on how Humans Describe Relative Positions of Image Objects	1
<i>Xin Wang, Pascal Matsakis, Lana Trick, Blair Nonnecke, Melanie Veltman</i>	
Perceptual Sketch Interpretation	19
<i>Markus Wuersch, Max J. Egenhofer</i>	
The Shape Cognition and Query Supported by Fourier Transform	39
<i>Tinghua Ai, Yun Shuai and Jingzhong Li</i>	

Classification

Classification of Landslide Susceptibility in the Development of Early Warning Systems	55
<i>Dominik Gallus, Andreas Abecker, Daniela Richter</i>	
Clusters in Aggregated Health Data	77
<i>Kevin Buchin, Maike Buchin, Marc van Kreveld, Maarten Löffler, Jun Luo, Rodrigo I. Silveira</i>	
Spatial Simulation of Agricultural Practices using a Robust Extension of Randomized Classification Tree Algorithms.....	91
<i>J. Stéphane Bailly, Anne Biarnes, Philippe Lagacherie</i>	
Impact of a Change of Support on the Assessment of Biodiversity with Shannon Entropy.....	109
<i>Didier Josselin, Ilene Mahfoud, Bruno Fady</i>	

Classification and Image Analysis

Implicit Spatial Information Extraction from Remote Sensing Images	133
<i>Erick Lopez-Ornelas, Guy Flouzat</i>	
The Application of the Concept of Indicative Neighbourhood on Landsat ETM+ Images and Orthophotos Using Circular and Annulus Kernels	147
<i>Madli Linder, Kalle Remm, Hendrik Proosa</i>	
Sensitivity of the C-band SRTM DEM Vertical Accuracy to Terrain Characteristics and Spatial Resolution*	163
<i>Thierry Castel, Pascal Oettli</i>	

Process Modelling

Improving the Reusability of Spatiotemporal Simulation Models: Using MDE to Implement Cellular Automata	177
<i>Falko Theisselmann, Doris Dransch</i>	
Support Vector Machines for Spatiotemporal Analysis in Geosensor Networks	197
<i>Jon Devine, Tony Stefanidis</i>	
Towards a Method to Generally Describe Physical Spatial Processes*	217
<i>Barbara Hofer, Andrew U. Frank</i>	

Generalisation and Multiple Representation

A Data Model for Multi-Scale Topographic Data	233
<i>J.E. Stoter, J.M. Morales, R.L.G. Lemmens, B.M. Meijers, P.J.M van Oosterom, C.W. Quak, H.T. Uitermark, L. van den Brink</i>	
An Interoperable Web Service Architecture to Provide Base Maps Empowered by Automated Generalization	255
<i>Theodor Foerster, Jantien Stoter, Rob Lemmens</i>	

Combining Three Multi-agent Based Generalisation Models: AGENT, CARTACOM and GAEL	277
<i>Cécile Duchêne, Julien Gaffuri</i>	

3D and Relief

Implementation of Building Reconstruction Algorithm Using Real World LIDAR Data	297
<i>Rebecca O.C. Tse, Chris Gold, Dave Kidner</i>	
A New Approach for Mountain Areas Cartography	315
<i>Loïc Gondol, Arnaud Le Bris, François Lecordix</i>	
Slope Accuracy and Path Planning on Compressed Terrain	335
<i>W Randolph Franklin, Daniel M Tracy, Marcus A Andrade, Jonathan Muckell, Metin Inanc, Zhongyi Xie, Barbara M Cutler</i>	
Processing 3D Geo-Information for Augmenting Georeferenced and Oriented Photographs with Text Labels*	351
<i>Arnoud De Boer, Eduardo Dias, Edward Verbree</i>	

3D

Interactive Geovisualization and Geometric Modelling of 3D Data - A Case Study from the Åknes Rockslide Site, Norway	367
<i>Trond Nordvik, Chris Harding</i>	
FieldGML: An Alternative Representation for Fields	385
<i>Hugo Ledoux</i>	
Marine GIS : Progress in 3D Visualization for Dynamic GIS	401
<i>Rafal Goralski, Christopher Gold</i>	

Ontology

The IGN-E Case: Integration Through a Hidden Ontology	417
<i>A Gómez-Pérez, JÁ Ramos, A Rodríguez-Pascual, LM Vilchez-Blázquez</i>	

All Roads Lead to Rome - Geospatial Modeling of Hungarian Street Names with Destination Reference	437
<i>Antal Guszlev, Lilla Lukács</i>	

Where is the Terraced House? On the Use of Ontologies for Recognition of Urban Concepts in Cartographic Databases*	449
<i>Patrick Lüscher, Robert Weibel, William A. Mackaness</i>	

Uncertainty and Matching

Information Processes Produce Imperfections in Data—The Information Infrastructure Compensates for Them	467
<i>Andrew U. Frank</i>	

Moving from Pixels to Parcels: The Use of Possibility Theory to Explore the Uncertainty Associated Object Oriented Remote Sensing	487
<i>Alexis Comber, Alan Brown, Katie Medcalf, Richard Lucas, Daniel Clewley, Johanna Breyer, Peter Bunting, Steve Keyworth</i>	

Data matching – a Matter of Belief*	501
<i>Ana-Maria Olteanu-Raimond, Sébastien Mustière</i>	

Shape and Spatial Relation 2

Deriving Topological Relationships Between Simple Regions with Holes	521
<i>Mark McKenney, Reasey Praing, and Markus Schneider</i>	

Spatial Rules Generate Urban Patterns: Emergence of the Small-World Network	533
<i>H. Rezayan, M.R. Delavar, A.U. Frank, A. Mansouri</i>	

Conceptual Neighborhoods of Topological Relations Between Lines	557
<i>Rui M.P. Reis, Max J. Egenhofer, João L.G. Matos</i>	

Spatial Support and Spatial Confidence for Spatial Association Rules	575
<i>Patrick Laube, Mark de Berg, Marc van Kreveld</i>	

Road and Navigation

A Primer of Picture-Aided Navigation in Mobile Systems	595
<i>Robert Laurini, Silvia Gordillo, Françoise Raffort, Sylvie Servigne, Gustavo Rossi, Nan Wang, Andrés Fortier</i>	
Road Network Model for Vehicle Navigation using Traffic Direction Approach	613
<i>Yang Yue, Anthony Gar-On Yeh, Qingquan Li</i>	
Clustering Algorithm for Network Constraint Trajectories	631
<i>Ahmed Kharrat, Iulian Sandu Popa, Karine Zeitouni, Sami Faiz</i>	
Author Index	649

Headway in Spatial Data Handling

13th International Symposium on Spatial Data Handling

Ruas, A.; Gold, C. (Eds.)

2008, XV, 650 p., Hardcover

ISBN: 978-3-540-68565-4