

Accepted papers

The following papers were accepted for presentation at COSIT'09, and inclusion in the Springer COSIT'09 proceedings, following rigorous peer review.

- Benjamin Adams (University of California, Santa Barbara) and Martin Raubal (University of California, Santa Barbara).
A Metric Conceptual Space Algebra
- Mehul Bhatt (University of Bremen), Frank Dylla (University of Bremen) and Joana Hois (University of Bremen).
Spatio-Terminological Inference for the Design of Ambient Environments
- Jean-François Condotta (CRIL, France), Souhila Kaci (CRIL, France), Pierre Marquis (CRIL, France) and Nicolas Schwind (CRIL, France).
Merging Qualitative Constraints Networks Defined on Different Qualitative Formalisms
- Helen Couclelis (University of California, Santa Barbara).
The Abduction of Geographic Information Science: Taking Spatial Reasoning to the Realm of Purpose and Design
- Clare Davies (Ordnance Survey, UK). Are Places Concepts?
- Familiarity and Expertise Effects in Neighborhood Cognition
- Hannah Dee (University of Leeds), David Hogg (University of Leeds) and Anthony Cohn (University of Leeds).
Scene modelling and classification using learned spatial relations
- Max Dupenois (University of Exeter) and Antony Galton (University of Exeter).
Assigning Footprints to Dot Sets: An Analytical Survey
- Paolo Fogliaroni (University of Bremen), Jan Oliver Wallgruen (University of Bremen), Eliseo Clementini (University of L'Aquila), Francesco Tarquini (University of L'Aquila) and Diedrich Wolter (University of Bremen).
A Qualitative Approach to Localization and Navigation Based on Visibility Information
- Simone Garlandini (University of Zurich) and Sara Irina Fabrikant (University of Zurich).
Evaluating the effectiveness and efficiency of visual variables for geographic information visualization
- Brent Hecht (Northwestern University) and Emily Moxley (University of California, Santa Barbara).
Terabytes of Tobler: Evaluating the First Law in a Massive, Domain-Neutral Representation of World Knowledge
- Barbara Hofer (Vienna University of Technology) and Andrew U. Frank (Vienna University of Technology).
Composing Models of Geographic Physical Processes
- Toru Ishikawa (University of Tokyo) and Tetsuo Yamazaki (University of Tokyo).
Showing Where to Go by Maps or Pictures: An Empirical Case Study at Subway Exits
- Alexander Klippel (Pennsylvania State University) and Rui Li (Pennsylvania State University).
The endpoint hypothesis: A topological-cognitive assessment of geographic scale movement patterns
- Yohei Kurata (University of Bremen).
Semi-Automated Derivation of Conceptual Neighborhood Graphs of Topological Relations
- Didier G. Leibovici (University of Nottingham).
Defining Spatial Entropy from Multivariate Distributions of Co-Occurrences
- Daniel R. Montello (University of California, Santa Barbara).
A Conceptual Model of the Cognitive Processing of Environmental Distance Information
- Joice Mota (INPE, Brazil), Gilberto Camara (INPE, Brazil), Maria Isabel Escada (INPE, Brazil), Olga Bittencourt (INPE, Brazil), Leila Fonseca (INPE, Brazil) and Lubia Vinhas (INPE, Brazil).
Case-Based Reasoning for Eliciting the Evolution of Geospatial Objects
- Martin Raubal (University of California, Santa Barbara), Stephan Winter (University of Melbourne) and Christopher Dorr (University of California, Santa Barbara).
Decentralized Time Geography for Ad-Hoc Collaborative Planning
- Karl Rehr (Salzburg Research), Sven Leitinger (Salzburg Research), Georg Gartner (Vienna University of Technology) and Felix Ortig (Vienna University of Technology).
An analysis of direction and motion concepts in situational verbal descriptions of route choices
- Kai-Florian Richter (University of Bremen).
Adaptable Path Planning in Regionalized Environments
- Simon Scheider (University of Muenster), Krzysztof Janowicz (University of Muenster) and Werner Kuhn (University of Muenster).
Grounding Geographic Categories in the Meaningful Environment
- Falko Schmid (University of Bremen).
Mental Tectonics - Rendering Consistent μ Maps
- Angela Schwering (University of Muenster), Kai-Uwe Kuehnberger (University of Osnabrueck), Ulf Krumnack (University of Osnabrueck) and Helmar Gust (University of Osnabrueck).
Spatial Cognition of Geometric Figures in the Context of Proportional Analogies
- Takeshi Shirabe (Vienna University of Technology).
Map Algebraic Characterization of Self-Adapting Neighborhoods
- Mathieu Simonnet (CERV, France), R. Daniel Jacobson (University of Calgary), Stephane Vieilledent (CERV, France) and Jacques Tisseau (CERV, France).
SeaTouch: A haptic and auditory maritime environment for non visual cognitive mapping of blind sailors

- John Stell (University of Leeds).

To Be and Not To Be: 3-valued graph granularity

- Alasdair Turner (University College London).

The Role of Angularity in Route Choice: An Analysis of Motorcycle Courier GPS Traces

- Maria Vasardani (University of Maine) and Max Egenhofer (University of Maine).

Comparing Relations over Multi-Holed Regions

- Jan Oliver Wallgrün (University of Bremen).

Exploiting Qualitative Spatial Constraints for Multi-Hypothesis Topological Map Learning

- Lisa Walton (University of Maine) and Michael Worboys (University of Maine).

An Algebraic Approach to Image Schemas for Geographic Space