

Frank Ostermann is currently employed as a Post-Doctoral Research Associate at the European Commission's Joint Research Center at Ispra, Italy. Together with Laura Spinsanti, he explores the possibilities of user generated geographic information in the application context of forest fires.

His research focus is on the visual analysis of heterogeneous spatio-temporal data and the evaluation of visualization techniques for the communication of forest fire risk to diverse target groups.

Frank has received his Diploma in Geography in October 2004 from the University of Hamburg, Germany, and his PhD in Geographic Information Science from the University of Zurich, Switzerland.

During 2009 and 2010, he has worked as Post-Doctoral Research Associate in the TRIPOD project, which investigated automated caption generation for volunteered user generated geo-referenced photographs.

Prior to his PhD research on the use of geographic visualization for the analysis of rich, multi-variate data on human activities in public space, Frank investigated the potential of quantitative spatio-temporal analysis for urban policies.

In summary, his main areas of research are:

- The application of GIScience and GISystems for sustainable urban planning.
- The modeling of complex human spatial behavior on the micro scale of individuals.
- The representation, analysis and visualization of spatio-temporal data.
- The integration and quality assessment of user generated content with traditional data infrastructures.

Fully peer-reviewed publications include:

Ostermann, F. (accepted): Digital Representation of Park Use and Visual Analysis of Visitor Activities. *Computers, Environment and Urban Systems*.

Ostermann, F. (2009): Indicators for Socially Sustainable Park Use; Proceedings of the 16th CORP Conference on Regional Planning. pp. 243-252, Sitges, Spain.

Ostermann, F. (2009): Appropriation of Public Park Space - A GIS-based case study; Proceedings of the 17th GIS Research UK conference, Durham, UK.

Ostermann, F. and Timpf, S. (2009): Use and Appropriation of Space in Urban Public Parks - GIS Methods in Social Geography; *Geographica Helvetica*, Vol. 64, 1, pp. 30-36

Ostermann, F. and Timpf, S. (2007): Evaluating Sustainable Space Appropriation in Public Parks; in: Schrenk, M. et al. (Eds.): Proceedings of the 12th CORP Conference on Regional Planning, Vienna, pp. 239-248

Ostermann, F. and Timpf, S. (2007): Modelling Space Appropriation in Public Parks; in: Wachowicz, M. and Bodum, L. (eds.): Proceedings of the 10th AGILE International Conference on Geographic Information Science, Aalborg.

Timpf, S. and Ostermann, F. (2006): Claiming Personal Space in Public Parks; in: Raubal, M. et al. (Eds.): Geographic Information Science, 4th International Conference, Münster, ifgi prints no. 28, pp. 369-372

Laura Spinsanti is actually a Research Associate at the Joint Research Centre, Institute for Environment and Sustainability, Spatial Data Infrastructures Unit of the European Commission.

Her current research interests include spatio-temporal conceptual modeling, geographic semantic enrichment, ontology application and semantic knowledge discovery. Together with Frank Ostermann, she explores the possibilities of user generated geographic information in the application context of forest fires.

She received her MS degree in Computer Science from University of Florence, Italy and her PhD in eLearning from Polytechnic University of Marche, Italy, respectively in 2002 and 2006.

From 2006 to 2008 she was a scientific collaborator of KDD-Lab (Knowledge Discovery and Delivery Laboratory): a joint research group of ISTI (Institute of Italian National Research Council) and the Computer Science Department of University of Pisa. She worked as Working group Coordinator and project supervisor and as a researcher on data base, data warehouse, data mining and applied ontology.

From 2009 to 2010, May she was researcher in the Database Laboratory at EPFL (Ecole Polytechnique Fédérale de Lausanne), Switzerland. She worked as a researcher on trajectory modeling, data base and data warehouse and applied ontology.

She is actually a member committee of:

- IADIS European Conference on Data Mining 2010
- IEEE International Workshop on Semantic Aspects in Data Mining (SADM), in conjunction with IEEE-ICDM International Conference on Data Mining 2010

She is Editorial Board of:

- Universal Ontology of Geographic Space: Semantic Enrichment for Spatial Data to be published by IGI Global (www.igi-global.com) scheduled for release in 2011.

Chapter Book Publication

Forecast analysis for sales in large-scale retail. Book chapter: “Handbook of Research on Data Mining in Public and Private Sectors: Organizational and Government Applications”, to appear, book printing in 2010.

Selected Scientific Publications:

High Quality True-Positive Prediction for Fiscal Fraud Detection. Proceedings of 2009 International Workshop on Domain Driven Data Mining (DDDM09), joint with ICDM2009, Miami, FL, USA, 6 December 2009.

A Tool for Extracting Ontologies from Geographical Databases. SEBD 2009, 7th Italian Symposium on Advanced Database Systems, Camogli (Genova), Italy, 21-24 June, 2009.

Ontology-supported Querying of Geographical Databases. Presented at Terra Cognita 2008, Workshop in conjunction with ISWC 2008, Karlsruhe, Germany, October 26, 2008. Published in Transaction in GIS 2008, 12(Suppl. 1): 31–44.

Building Geospatial Ontologies from Geographical Databases. GeoS2007, Mexico City November 29-30, 2007. Lecture Notes in Computer Science, vol. 4853, pag. 195-209, Springer 2007.

Creation and Use of Lexicons and Ontologies for Natural Language Interface to Databases. International conference on Language Resource And Evaluation, LREC Maggio 2006, Genova.