# Fourth International Workshop on Semantic and Conceptual Issues in Geographic Information Systems (SeCoGIS 2010)

### in conjunction with the 29<sup>th</sup> International Conference on Conceptual Modeling (ER 2010) Vancouver, Canada, November 1-4, 2010

# **Final Call for Papers**

(Deadline extension)

Recent advances in information technologies have increased the production, collection, and diffusion of geographical data, thus favoring the design and development of geographic information systems (GIS). Nowadays GISs are emerging as a common information infrastructure, which penetrate into more and more aspects of our society. This has given rise to new methodological and data engineering challenges in order to accommodate new users' requirements for new applications. Conceptual and semantic modelings are ideal candidates to contribute to the development of the next generation of GIS solutions. They allow to elicit and capture user requirements as well as the semantics of a wide domain of applications.

SeCoGIS is intended to bring together researchers, developers, users, and practitioners carrying out research and development in geographic information systems. The aim is to stimulate discussions on the integration of conceptual modeling and semantics into current geographic information systems, and how this will benefit the end users. The workshop will provide a forum for original research contributions and practical experiences of conceptual modeling and semantic web technologies for GIS, fostering interdisciplinary discussions in all aspects of these two fields, and will highlight future trends in this area. The workshop will be organized in a way to highly stimulate interaction amongst the participants.

#### **Topics of interest**

We invite submissions that address theoretical, technical, and practical topics of semantic and conceptual issues for GIS. Suggested topics include, but are not limited to the following:

- Spatio-temporal ontologies
- Spatio-temporal data modeling
- Multi-resolution and multi-representation in GIS
- Spatial services ontologies
- Spatial services modeling
- Spatial query languages and interfaces
- Semantic GIS in environmental and urban contexts
- Geographical information search engines
- Visualization and personalization of spatial information
- Spatial data infrastructures, interoperability, and standards
- Spatial data warehouses
- Spatial data mining and statistics
- Spatial decision making
- Semi-structured geographic data modeling and reasoning
- Semantic Web and geographic information

# **Paper Submission**

**Formatting Guidelines** SeCoGIS 2010 proceedings will be published by Springer-Verlag in the LNCS series. Thus, authors must submit manuscripts using the Springer-Verlag LNCS style for Lecture Notes in Computer Science. See the page <u>http://www.springer.de/comp/lncs/authors.html</u> for style files and details. The page limit for workshop papers in LNCS format is 10 pages.

**Submission Guidelines** Submission to SeCoGIS 2010 will be electronically only. Authors are asked to submit an abstract first, and then to upload the full paper (in PDF format). The online submission system is available at the address <u>http://cs.ub.ac.be/conferences/secogis10</u>

Extended versions of a selection of best papers presented at the workshop will be considered for publication in a special issue of the <u>Journal of Spatial Information Science (JoSIS)</u>.

#### **Important Dates**

Paper abstract submission:	April 19, 2010
Full paper submission:	April 26, 2010
Author notification:	June 4, 2010
Camera-ready paper submission:	June 30, 2010
Author registration	July 20, 2010
Workshop:	November 1-4, 2010

# SeCoGIS 2010 Workshop Chairs

Jean Brodeur	Esteban Zimányi
Natural Ressources Canada, Canada	Université Libre de Bruxelles, Belgium
Email: brodeur@rncan.gc.ca	Email: ezimanyi@ulb.ac.be

# SeCoGIS Steering Committee

Claudia Bauzer Medeiros	Michela Bertolotto
University of Campinas, Brazil	University College Dublin, Ireland
Email: cmbm@ic.unicamp.br	Email: michela.bertolotto@ucd.ie

Jean Brodeur Natural Ressources Canada, Canada Email: brodeur@rncan.gc.ca

Christelle Vangenot Ecole Polytechnique Fédérale de Lausanne, Switzerland Email: christelle.vangenot@epfl.ch Christophe Claramunt

Naval Academy Research Institute, France Email: claramunt@ecole-navale.fr

Esteban Zimányi Université Libre de Bruxelles, Belgium Email: ezimanyi@ulb.ac.be

# **PROGRAM COMMITTEE**

Alia I. Abdelmoty (Cardiff University, UK) Gennady Andrienko (Fraunhofer Institute IAIS, Germany) Natalia Andrienko (Fraunhofer Institute IAIS, Germany) Claudio Baptista (Universidade Federal de Campina Grande, Brazil) Spiridon Bakiras (City University of New York, USA) Yvan Bédard (Université Laval, Canada) Michela Bertolotto (University College Dublin, Ireland) Jean Brodeur (Natural Resources Canada, Canada) Bénédicte Bucher (Institut Géographique National, France) James D. Carswell (Dublin Institute of Technology, Ireland) Nicholas Chrisman (Université Laval, Canada) Christophe Claramunt (Naval Academy Research Institute, France) Eliseo Clementini (University of L'Aquila, Italy) Maria Luisa Damiani (University of Milano, Italy) Geoffrey Edwards (Université Laval, Canada) Clodoveu Davis (Federal University of Minas Gerais, Brazil) Max Egenhofer (NCGIA, USA) Fernando Ferri (Istituto di Ricerche sulla Popolazione e le Politiche Sociali, Italy) Frederico Fonseca (Penn State University, USA) Antony Galton (University of Exeter, UK) Ki-Joune Li (Pusan National University, South Korea) Thérèse Libourel (Université de Montpellier II, France) Jugurta Lisboa Filho (Universidade Federal de Viçosa, Brazil) Miguel R. Luaces (Universidade da Coruña, Spain) Jose Macedo (Federal University of Ceara - Brazil) Pedro Rafael Muro Medrano (Universidad de Zaragoza, Spain) Mir Abolfazl Mostafavi (Université Laval, Canada) Dimitris Papadias (Hong Kong University of Science and Technology, Hong Kong) Dieter Pfoser (Institute for the Management of Information Systems, Greece) Diego Seco (Universidade da Coruña, Spain) Andrea Rodriguez (University of Concepción, Chile) Sylvie Servigne-Martin (INSA de Lyon, France) Emmanuel Stefanakis (Harokopio University of Athens, Greece) Kathleen Stewart Hornsby (University of Iowa, USA) Christelle Vangenot (Ecole Polytechnique Fédérale de Lausanne, Switzerland) Luis Manuel Vilches Blázquez (Facultad de Informática, Universidad Politécnica de Madrid, Spain) Lubia Vinhas (Instituto National de Pesquisas Espaciais, Brazil) José Ramón Ríos Viqueira (Technological Research Institute of the University of Santiago de Compostela, Spain) Nancy Wiegand (University of Wisconsin-Madison, USA)