6th ACM SIGSPATIAL International Workshop on Computational Transportation Science

November 5, 2013, Orlando, FL, USA http://www.ctscience.org

Held in conjunction with the

21st ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL GIS 2013) November 5-8 — Orlando, FL, USA

co-organized by ISPRS

CALL FOR PAPERS

The 6th International Workshop on Computational Transportation Science intends to bring together communities interested in the computation, knowledge discovery and technology policy aspects of surface transportation systems. The organizers of IWCTS welcomes papers from researchers in computer science, transportation science, urban and regional planning, civil engineering, geography, geoinformatics, computer vision and related disciplines to submit papers for consideration for presentation and discussion at the one-day workshop and for publication in the conference proceedings.

BACKGROUND

In the near future, vehicles, travellers, and the infrastructure will collectively have billions of sensors that can communicate with each other. Transportation systems, due to their distributed/mobile nature, can become the ultimate test-bed for a ubiquitous (i.e., embedded, highly-distributed, and sensor-laden) computing environment of unprecedented scale. This environment will enable numerous novel applications and order of magnitude improvement of the performance of existing applications. Information technology is the foundation for implementing new strategies, particularly if they are to be made available in real-time to wireless devices in vehicles or in the hands of people. Contributing are increasingly more sophisticated geospatial and spatio-temporal information management capabilities. Human factors, technology adoption and use, user feedback and incentives for collaborative behaviour are areas of technology policy central to the success of this ubiquitous computing environment.

The emerging discipline of Computational Transportation Science (the science behind Intelligent Transportation Systems) combines computer science and engineering with the modelling, planning, and economic aspects of transportation planning and engineering to leverage developments in the above domains. By taking advantage of ubiquitous computing, Computational Transportation Science applications can help create more efficient, equitable, liveable and sustainable transportation systems and communities.

SCOPE OF SUBMISSIONS

The International Workshop on Computational Transportation Science invites submissions of original, previously unpublished papers contributing to Computational Transportation Science. Position papers that report novel research directions or identify challenging problems are also invited. Papers incorporating one or more of the following themes are especially encouraged:

- Collaborative transport, including collaborative multi-modal transport
- Computational and artificial intelligence aspects of assisted driving, collaborative transport or multi-modal transport
- Crowd sourcing and participatory sensing in transport
- Cameras as sensors for trajectory acquisition and event recognition
- Computer Vision-based information extraction from image sequences
- Context aware analysis of movement data
- New processing frameworks for handling masses of transport data (e.g. Hadoop)
- Uncertain information in collaborative transport and assisted travelling
- Mechanism design for collaborative behaviour
- Data mining and statistical learning for travel information
- Human-computer interfaces in intelligent transportation applications
- Privacy, security, and trust in transportation information
- Novel applications targeted to health, mobility, liveability and sustainability

SUBMISSION INSTRUCTIONS

Authors should prepare an Adobe Acrobat PDF version of their full paper. Papers must be in English and not exceed 6 pages double column in ACM SIG format (US Letter size, 8.5 x 11 inches, <u>http://www.acm.org/sigs/publications/proceedings-templates</u>) including text, figures and references. Position papers are limited 4 pages. Each submission should start with: the title, abstract, and names, contact information of authors, type of the submission (research paper or position paper). To submit a paper, please visit

<u>https://www.easychair.org/conferences/?conf=iwcts13</u>. Accepted papers will be published in the ACM digital library. Authors of accepted papers must guarantee that their paper will be presented at the workshop.

IMPORTANT DATES

- Paper submissions due: September 16, 2013
- Notification to the authors: September 23, 2013
- Camera ready papers due: October 5, 2013
- IWCTS Workshop: November 5, 2013
- ACM SIGSPATIAL 2013 Conference: November 5-8, 2013

REGISTRATION

Registration for the IWCTS 2013 will be handled through the ACM GIS conference website. Please visit the <u>conference site to register</u>, and for additional information on nearby accommodation.

One author per accepted workshop paper is required to register for both the main SIGSPATIAL conference and the workshop, to attend the workshop, and to present the accepted paper in the workshop. Otherwise, the accepted paper will not appear in the workshop proceedings or in the ACM Digital Library version of the workshop proceedings."

Workshop Chairs

Monika Sester, Leibniz Universität Hannover, Germany John Krumm, Microsoft Research, USA Clement Mallet, IGN Paris, France

Publicity Chair

Steve Liang, University of Calgary, Canada

Steering Committee

Ouri Wolfson, University of Illinois at Chicago, USA Bhaduri Budhendra, Oak Ridge National Laboratory, Tennessee, USA

Program Committee Members

Mathieu Bredif, IGN, France Maike Buchin, Ruhr Universität Bochum, Germany Thierry Delot, INRIA Lille & University of Valenciennes, France Somayeh Dodge, The Ohio State University, USA Glenn Geers, NICTA & University of New South Wales, Australia Bart Kuijpers, Hasselt University, Belgium Patrick Laube, University of Zurich, Switzerland Harvey Miller, University of Utah, USA Matthias Müller-Hannemann, Universitaet Halle-Wittenberg, Germany Julien Perret, IGN, France Anne Ruas, IFSTTAR, France Shashi Shekhar, University of Minnesota, USA Piyushimita (Vonu) Thakuriah, University of Glasgow Goce Trajcevski, Northwestern University, USA Yury Vizilter, GosNIIAS, Russia Stephan Winter, University of Melbourne, Australia Alper Yilmaz, The Ohio State University, USA Michael Ying Yang, Leibniz University Hannover, Germany Xiaoguang Zhou, School of Geosciences and Info-Physics, Hunan, China