### Special session: TTASC: Transport and Traffic Analytics in Smart Cities

Chair and Coordinator: Asst. Prof. Ivana Semanjski, University of Zagreb, Croatia/ Ghent University, Belgium <u>ivana.semanjski@fpz.hr</u>

along with

### DATA ANALYTICS 2016, The Fifth International Conference on Data Analytics

http://www.iaria.org/conferences2016/DATAANALYTICS16.html October 9 - 13, 2016 - Venice, Italy

Smart cities are emerging area at the intersection of information and communication technologies (ICT), urban planning, energy efficiency and mobility related research, which aims to enhance quality of life and support development of more sustainable communities. Special session on Transport and Traffic Analytics in Smart Cities (TTASC) will bring researchers, developers, and practitioners to present their latest research, results, and ideas in all areas of Transport and Traffic Analytics. TTASC 2016 will provide a forum for the exchange of ideas and good practice on topical issues related to the smart cities. Papers related to techniques, methodologies and applications in mobility related data collection, data analytics and innovative services are especially solicited.

## **Topics**

### The topics of interest include, but are not limited to:

- Smart city sensing:
  - Data sensing, integration, and information fusion for sustainable mobility
  - IoT systems for sustainable mobility
  - Emerging sensing solutions using autonomous vehicles and unmanned aerial vehicles
  - Crowdsourcing, crowdsensing, participatory sensing;
- Date pre-processing:
  - Security, trust, privacy and anonymization for ITS applications
  - Data integrity and reliability
- Data Analytics:
  - o Big data management and analytics for smart city applications
  - Big data for vehicular sensor networks
  - Big data for travel behavior analytics
  - Context-aware mobility related analytics
  - Self-learning (pattern discovery, prediction, auto-configuration);
  - Optimization and metaheuristics
  - o Data mining
- Smart City mobility services:
  - o Geo-localized services, location-based services, near field communications

- Real-time traveler information
- Multimodal route planning
- Cooperative mobility
- o Smart Demand Management (passengers and freight)
- Connected and autonomous vehicles
- o Models of smart urban mobility systems
- Smart mobility and society:
  - Smart mobility policy making
  - o Institutional and legal aspects of smart mobility
  - o Economic and environmental impacts of smart mobility
  - o Human factors in smart mobility
  - o New concepts, case studies, and benchmarking of urban mobility
  - o Smart users experience

## **Program Committee**

- Asst. prof. Ivana Semanjski, University of Zagreb, Croatia / Ghent University, Belgium – special session chair and coordinator
- Msc. João Bernardino, TIS, Portugal
- Prof. dr. ir. Sidharta Gautama, Ghent University, Belgium
- Prof. dr. sc. Antinio Pratelli, University of Pisa, Italy
- Prof. dr. sc. Massimiliano Petri, University of Pisa, Italy
- MSc. Silvio Semanjski, NHV, Belgium
- Asst. prof. Pero Vidan, University of Split, Croatia
- BSc. Predrag Zivanovic, University of Belgrade, Serbia

### Venue

NOVOTEL VENEZIA MESTRE CASTELLANA Via Ceccherini 21 30174 VENEZIA MESTRE ITALY

### Program

#### Seaplane Traffic in the Republic of Croatia

Pero Vidan, Merica Slisković, Nikola Ocasic

Wednesday, October 12, In Room D (10:30 - 12:15)

### Travelled Distance Estimation for GPS-based Round Trips: Car-Sharing Use Case

Angel J. Lopez, Ivana Semanjski, Dominique Gillis, Daniel Ochoa, Sidharta Gautama

Wednesday, October 12, In Room D (10:30 - 12:15)

# Forecasting Travel Behaviour from Crowdsourced Data with Machine Learning Based Model

Angel J. Lopez, Ivana Semanjski, Sidharta Gautama

Wednesday, October 12, In Room D (10:30 - 12:15)

### **Datamining and Big Freight Transport Database**

Massimiliano Petri, Antonio Pratelli, Giovanni Fusco

Wednesday, October 12, In Room D (10:30 - 12:15)

#### Tracking Cyclists and Walkers: Will it Change Planning and Policy Processes?

Joao Bernardino, Predrag Zivanović, Mafalda Lopes, Slaven Tica, Branko Milovanovic, Stanko Bajcetic, Giacomo Lozzi Monday, October 10, In Room C (10:30 - 12:15)