



CAGI VSB - Technical University of Ostrava Faculty of Mining and Geology Institute of Geoinformatics







# **Geoinformatics for** Intelligent Transportation

New Hall of VSB - TUO, 17. listopadu 15, Ostrava-Poruba, Czech Republic, EU

January 27 - 29, 2014

#### under auspices of

Association of Geographic Information Laboratories for Europe European Spatial Data Research Organisation Intelligent Transport Systems & Services Czech Association for Geoinformation Slovak Association for Geoinformatics Miroslav Novák, President of the Moravian-Silesian Region Petr Kajnar, Mayor of the City of Ostrava Ivo Vondrák, Rector of VSB - Technical University of Ostrava







## Programme









## Monday 27<sup>th</sup> January

9:00 - 12:00: Excursion: National Transport Information Centre \*\*

10:30 – 12:00: Workshop: Floating Car Data. (room NA3; Pavel Hrubeš)

13:00 – 13:15: **Symposium opening** (room NA1)

#### 13:15 – 15:15: **Keynote lessons** (room NA1)

James Haworth (University College London): Spatio - Temporal Analytics of Network Data Bin Jiang (University of Gävle): Ht-Index for Characterizing Street Hierarchy Itzhak Benenson (Tel-Aviv University): Transport Accessibility from a Human Point of View

Pavel Hrubeš (Czech Technical University in Prague): Geographic Information Systems and Applications in Intelligent Transport Systems

15:15 - 15:45: Coffee break

#### 15:45 – 17:15: Session **Transport modelling** (room NA2; Itzhak Benenson)

Caha Jan, Dvorský Jiří: Optimal path problem with possibilistic weights

Kolisko Pavel: Examples of the implementation of fuzzy models in tourism in the South Moravian region

Benenson Itzak: Micro-Simulation of the Car-Pedestrian Road Accidents

Dias Daniela et al.: Impact of road transport on urban air quality: GIS and GPS as a support for a modelling framework

Dobešová Zdena, Hybner Radek: Optimal placement of the bike rental stations and their capacities in Olomouc

17:15 - 17:45: Coffee break

#### 17:45 – 19:15: Session Sensor data and services (room NA2; James Haworth)

Boori Mukesh, Ferraro Ralph: Global Land Cover classification based on microwave polarization and gradient ratio (MPGR)

Hron Vojtěch, Halounová Lena: Automatic generation of 3D building models from point clouds

Pinho Fábio, Carvalho Alexandre, Carreira Rui: Improving Geolocation By Combining GPS With Image Analysis

Hübnerová Jitka: Towards a solution for the public web-based GIS monitoring and alerting system

Andziulis Arunas et al.: Investigation of sonar stabilisation method for improved seafloor image quality

19:15 - 20:15: Welcome drink

#### Tuesday 28th January

9:00 – 10:30: Workshop: Spatio-Temporal Analytics of Network Data (room NA2; James Haworth)

10:30 - 11:00: Coffee break

11:00 – 12:00: Session Intelligent transport systems (room NA2; Pavel Hrubeš)

Kurowska Krystyna, Kryszk Hubert, Kietlinska Ewa: Photovoltaics as an element of inteligent transport system development

Feng Tao, Timmermans Harry J.P.: Detecting spatial and tempoval route information of GPS traces

Zajíčková Lenka: Mobile application for acquiring geodata on public transport network

12:00 - 13:00: Lunch

13:00 – 15:00: Session Transport planning and accessibility (room NA2; Bin Jiang)

Konecny Gottfried: Status of Mapping in the World

Ivan Igor, Horák Jiří: Demand and supply of transport connections for commuting in the Czech Republic

Holubec Vladimír, Halounová Lena: Relationship between average road traffic and particular statistical indicators of urban development of cities in the Czech Republic

Horák Jiří, Ivan Igor, Fojtík David: Time of day dependency of public transport accessibility in the Czech Republic

Stępniak Marcin, Rosik Piotr: The impact of data aggregation on potential accessibility values

Šafář Václav, Šmejkal Zdeněk: The accuracy of digital models for road design

15:00 – 15:30: Coffee break

15:30 – 16:30: Session **Transport planning and accessibility** (room NA2; Gottfried Konecny) van der Waerden Petrus, Timmermans Harry, van Hove Lies: *GPS Data and Car Drivers' Parking Search Behavior in the City of Turnhout, Belgium*Paulovičová Ivica et al.: *Urban heartbeats (Daily cycle of public transport intensity)*Jánošíková Ľudmila, Krempl Michal: *Train platforming problem* 

16:30 - 17:00: Coffee break

17:00 – 18:30: Workshop: Axwoman: automatical generating of axial lines (room NA2; Bin Jiang)

18:30 - 22:00: Banquet

### Wednesday 29th January

9:00 – 12:00: Sightseeing tour Ostrava (departure from the meeting point – see map below)

10:00 – 12:00: Workshop: **Application of satellite InSAR for monitoring highway deformations** (room J423, Milan Lazecký)

10:30 - 11:00: Coffee break

12:00 – 15:00: Excursion: **Airport Ostrava-Mošnov** (aircraft and helicopter flight simulators, aircraft repair centre)

12:30 – 13:00: Symposium GIS Ostrava 2014 closing ceremony (room NA1)



1: New Hall (NA1, NA2, NA3, NA4, NA5)

2: Rooms J423, J424, J339, J259

3: HOTEL

4: Parking - meeting point (Bus for excursion leaves from this place)

# http://gis.vsb.cz/gisostrava/

New Hall of VSB – TUO, 17. listopadu 15, Ostrava-Poruba, Czech Republic, EU Latitude: 49.830775° N Longitude: 18.162951° E