VSB – Technical University of Ostrava
Institute of Geoinformatics

GIS...
Ostrava 2016

The Rise of
Big Spatial Data

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

March 16 - 18, 2016

Geo**Informatika**
spravodajský portál slovenskej a českej geokomunity
www.geoinformatika.sk

gisportal.cz

GEOBUSINESS

First circular and call for papers

under auspices of:
European Spatial Data Research Organisation
International Society for Photogrammetry and Remote Sensing
Czech Association for Geoinformation
Slovak Association for Geoinformatics
Miroslav Novák, President of the Moravian-Silesian Region
Ivo Vondrák, Rector of VSB – Technical University of Ostrava

Rationale

Welcome to dawn of the Era of Big Data. Though in sight, we are not quite there. Are you ready for the day of Big Spatial Data? Are you and your applications sufficiently resilient to enter the New Era?

Big spatial data is characterised by three main features: Volume beyond the limit of usual geo-processing, Velocity higher than available by usual processes, and Variety, combining more diverse geodata sources than usual. The popular term denotes a situation when one or more of these key properties reach a state when traditional methods of geodata collection, storing, processing, controlling, analysing, modelling, validating and visualizing fail to provide effective solutions. Entering the Era of Big Spatial Data requires finding solutions addressing all "small data" issues that will soon induce "big data" troubles. Resilience for Big Spatial Data means solving heterogeneity of spatial data sources (in topics, purpose, completeness, guarantee, licensing, coverage etc.), large volumes (from gigabytes to terabytes and more), undue complexity of geo-applications and systems (i.e. combination of standalone applications with web services, mobile platforms and sensor networks), neglected automation of geodata preparation (i.e. harmonisation, fusion), insufficient control of geodata collection and distribution processes (i.e. scarcity and poor quality of metadata and metadata systems), limited capacity of analytical tools (i.e. domination of traditional causal-driven analysis), low performance of visual systems, inefficient knowledge discovery techniques (for transformation of vast amounts of information into tiny and essential outputs) and many more. These trends will even accelerate as sensors in the world become more ubiquitous.

Come to discuss these issues and how to solve them to regulate the flood of spatial data.

Topics

Submissions on theoretical, methodological or applied aspects focused on (but not limited to) following topics are encouraged:

* Terrestrial-, Aerial- and Satellite-based Geosensors, Geosensors Networks
* Digital Earth Observation
* Open Geodata
* Crowdsourcing, Volunteered Geographic Information, Participatory GIS
* Variability of Spatial Data
* Complexity of Spatial Data
* Data Harmonisation and Geocoding
* Spatial Data Quality
* Spatial Data Mining and Knowledge Discovery
* Spatiotemporal Data Analysis and Modelling
* Geocomputation for Big Geodata
* Big Spatial Data Visualisation
* Sensitive Spatial Data
* Spatial Data Streams
* Real Time Geodata and Real Time Applications
* Spatial Mobility Data
* Geosocial Data (geocoded social media data)
* Unstructured Spatial Data

Call for papers

Researchers are encouraged to present results of their work in the specified topics. For the paper submission, please, visit conference webpages.
All submissions will be **double blind peer reviewed** by members of the scientific committee or by external experts. All accepted papers will be published in the Proceedings as a part of **Lecture Notes in Geoinformation and Cartography Series** (Springer) and will be issued after the symposium.

Keyspeakers

Alex Singleton (University of Liverpool, GBR)
Martin Raubal (ETH Zurich, CHE)
Gennady Andrienko (Fraunhofer Institute for Intelligent Analysis and Information Systems, DEU)
Natalia Andrienko (Fraunhofer Institute for Intelligent Analysis and Information Systems, DEU)

Scientific committee

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Hrvoje Gold (University of Zagreb, HRV)

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Jaroslav Hofierka (Pavol Jozef Safarik University in Kosice, SVK)

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Ákos Jakobi (Eötvös Loránd University, HUN)

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Hassan Karimi (University of Pittsburgh, USA)

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Marcin Stępniak (Polish Academy of Science, POL)

Harry J.P. Timmermans (Eindhoven University of Technology, NLD)

Vít Voženílek (Palacký University, CZE)

Registration fees

Early registration (before 1. 2. 2016)	**180 EUR**	Discount for members of
Late registration (after 1. 2. 2016)	**200 EUR**	CAGI, SAGI, ISPRS, EuroSDR
Payment in cash	**250 EUR**	**-10 EUR/person**.
Author (one/paper, before 1. 2. 2016)	**150 EUR**	
Full-time students	**70 EUR**	The registration fee covers conference
Excursion	**10 EUR**	attendance, proceedings, coffee
Workshop	**will be specified later**	breaks, welcome drink, lunch and evening banquet.
Participation at sessions of conference "Geoinformatika pro společnost" **	**FREE**	** *Valid only with registration to the conference The Rise of Big Spatial Data*

Important days

November 1, 2015	workshop submission deadline
Novemver 15, 2015	notification of workshop acceptance
December 1, 2015	deadline for full papers submission
January 15, 2016	notification of paper acceptance
February 1, 2016	deadline for camera ready paper submission
February 1, 2016	early registration (discounted fees)
March 16-18, 2016	GIS Ostrava 2016 conference

Workshops

- will be specified later
(submission of workshops proposals are welcome - contact us at gisostrava@vsb.cz)

Excursions

- Dolní oblast Vítkovice (www.dolnivitkovice.cz)
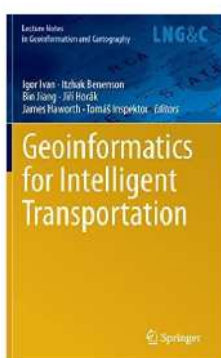- National Supercomputing Center
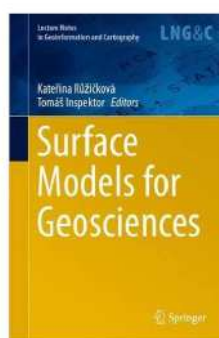- Observatory and Planetarium of Ostrava (www.planetariumostrava.cz)

Language

English

Previous Conferences

GIS Ostrava 2014 -
**Geoinformatics for
Intelligent Transportation**

**indexed in SCOPUS and
Web of Science**

GIS Ostrava 2015 -
**Surface Models for
Geosciences**

Address

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