## Eleventh International Conference on "Geographical Analysis, Urban Modeling, Spatial Statistics" GEOG-AND-MOD 16

http://oldwww.unibas.it/utenti/murgante/geog\_An\_Mod\_16/index.html

in conjunction with

# The 2016 International Conference on Computational Science and its Applications (ICCSA 2016)

July 4th - July 7th 2016

Beijing, China http://www.iccsa.org/

### **Description**

During the past decades the main problem in geographical analysis was the lack of spatial data availability. Nowadays the wide diffusion of electronic devices containing geo-referenced information generates a great production of spatial data. Volunteered geographic information activities (e.g. OpenStreetMap, Wikimapia), public initiatives (e.g. Open data, Spatial Data Infrastructures, Geo-portals) and private projects (e.g. Google Earth, Bing Maps, etc.) produced an overabundance of spatial data, which, in many cases, does not help the efficiency of decision processes.

The increase of geographical data availability has not been fully coupled by an increase of knowledge to support spatial decisions.

The inclusion of spatial simulation techniques in recent GIS software favoured the diffusion of these methods, but in several cases led to the mechanism based on which buttons have to pressed without having geography or processes in mind.

Spatial modelling, analytical techniques and geographical analyses are therefore required in order to analyse data and to facilitate the decision process at all levels, with a clear identification of the geographical information needed and reference scale to adopt.

Old geographical issues can find an answer thanks to new methods and instruments, while new issues are developing, challenging the researchers for new solutions. This Conference aims at providing innovative and original contribution to the ongoing debate on the above mentioned issues and at improving the process of knowledge acquisition, by means of the development of new techniques and methods.

# The programme committee especially requests high quality submissions on the following (but not limited to) Conference Themes:

Geostatistics and spatial simulation;

Agent-based spatial modelling;

Cellular automata spatial modelling;

Spatial statistical models;

Space-temporal modelling;

Environmental Modelling;

Geovisual analytics, geovisualisation, visual exploratory data analysis;

Visualisation and modelling of track data;

Spatial Optimization;

Interaction Simulation Models;

Data mining, spatial data mining;

Spatial Data Warehouse and Spatial OLAP;

Integration of Spatial OLAP and Spatial data mining;

Spatial Decision Support Systems;

Spatial Multicriteria Decision Analysis;

Spatial Rough Set;

Spatial extension of Fuzzy Set theory;

Ontologies for Spatial Analysis;

Urban modeling;

Applied geography;

Spatial data analysis;

Dynamic modelling;

Simulation, space-time dynamics, visualization and virtual reality.

Each paper will be independently reviewed by 3 programme committee members. Their individual scores will be evaluated by a small sub-committee and result in one of the following final decisions: accepted, or accepted on the condition that suggestions for improvement will be incorporated, or rejected. Notification of this decision will take place on April 2016.

Individuals and groups should submit complete papers (10 to 16 pages). Accepted contributions will be published in the Springer-Verlag Lecture Notes in Computer Science (LNCS) volumes

#### **Authors Guideline**

Please adhere strictly to the formatting provided in the template to prepare your paper and refrain from modifying it.

The submitted paper must be camera-ready and formatted according to the rules of LNCS. For formatting information, see the publisher's web site

(http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0).

Submission implies the willingness of at least one of the authors to register and present the paper.

#### **Submission**

papers should be submitted at:

http://ess.iccsa.org/

please don't forget to select "Geographical Analysis, Urban Modeling, Spatial Statistics GEOG-AND-MOD 16" workshop from the drop-down list of all workshops.

### **Proceedings**

Papers accepted to "Geographical Analysis, Urban Modeling, Spatial Statistics GEOG-AN-MOD 16" will be published in the ICCSA Conference proceedings, in Springer-Verlag Lecture Notes in Computer Science (LNCS) series, with doi, indexed by WOS, Scopus and DBLP. Participants to "Geographical Analysis, Urban Modeling, Spatial Statistics GEOG-AN-MOD 16" will be invited to submit an extended version of their paper for special issues on International Journals and book.

Extended version of previous GEOG-AN-MOD papers have been included in the following special issues:

- <u>Transactions on Computational Science JournalÂ</u> VI Vol. 5730-0324, Springer-Verlag, Berlin ISSN: 1611-3349.
- Murgante B., Borruso G., Lapucci A. (2009)Â "Geocomputation and Urban <u>Planning</u>"Â Studies in Computational Intelligence, Vol. 176. Springer-Verlag, Berlin.
- Murgante B., Borruso G., Lapucci A. (2011)Â "Geocomputation, Sustainability and Environmental Planning"Â Studies in Computational Intelligence. Springer-Verlag, Berlin
- Murgante B., Kanevski M., Marvuglia A. Cellura M. (2012) Special Issue on "Analysing, Modelling and VisualizingSpatial Environmental Data"Â International Journal of Agricultural and Environmental Information Systems (IJAEIS) IGI Global volume 3(1),
- Murgante B., Kanevski M., Marvuglia A. Cellura M. (2012) Special Issue on "Analysing, Modelling and VisualizingSpatial Environmental Data" International Journal of Agricultural and Environmental Information Systems (IJAEIS) IGI Global volume 3(2)Â
- Borruso G., Bertazzon S., Favretto A. Murgante B., Torre C.
  (2011)Â "Geographic Information Analysis for Sustainable Development and Economic Planning: New Technologies"Â IGI Global
- Murgante B., Borruso G., Gibin M. (2012)Â "NeoGeography and WikiPlanning"Â Future Internet (ISSN 1999-5903).
- Lasaponara R., Asche H., Lanorte A., Murgante B., Borruso G. and Masini N. (2012)Â "Investigating Earth system changes and dynamics using remote sensing and geospatial analysis"Â Earth System Dynamics Interactive Open Access Journal (ISSN:Â 2190-4979).
- Lasaponara R., Murgante B., Masini N., Ge Y., Masini N., Asche H.
  (2013) "Advance in geocomputation" International Journal of Applied Earth Observation and Geoinformation Elsevier.
- Murgante B., Borruso G. (2013) "Using technologies to preserve and promote cultural heritage and landscape" A International Journal of Agricultural and Environmental Information Systems (IJAEIS) IGI Global volume 4(3).
- Journal of Mobile MultimediaÂ
- International Journal of Web Information Systems
- International Journal of Business Intelligence and Data Mining 2013 Vol. 8 No.
  4
- Marvuglia A., Murgante B., Benetto E. (2015) "Calling for an Integrated Computational Systems Modelling Framework for Life Cycle Sustainability Analysis" Journal of Environmental Accounting and Management Volume 3, Issue 3 pp. 213-216 | DOI: 10.5890/JEAM.2015.09.001
- Murgante B., Borruso G. (2015) "Cities and Smartness: The True Challenge" International Journal of Agricultural and Environmental Information Systems, Volume 6, Issue 4
- Marvuglia A., Murgante B., Benetto E. (2015) "Computational Algorithms for Sustainability Assessment" Journal of Environmental Accounting and Management Volume 3, Issue 2 pp. 87-88 | DOI: 10.5890/JEAM.2015.06.001

• Murgante B., Borruso G. (2016) "Recent trends in spatial information" International Journal of Agricultural and Environmental Information Systems, Volume 7, Issue 1

## **Important dates**

28 February 2016: Deadline for full paper submission 15 April 2016: Notification of acceptance 10 May 2016: Deadline for Camera Ready Papers 4-7 July, 2016: ICCSAÂ 2016Â Conference