2nd CALL FOR PAPERS

Researchers are invited to submit full papers describing original and unpublished research. All manuscripts will be subject to the triple blind peer review process. Accepted full papers will be published within the Springer Lecture Notes in Geoinformation and Cartography (LNG&C) series.

The topics of the workshop cover major geoinformation science including (but are not limited to):

- **Geomatic** - GPS, GNSS, Engineering Survey, Industrial Survey, Deformation Survey, Modern Cadastre (including Marine, 3D Cadastre)
- **GIS** - 3D GIS, 3D City Modeling, 3D Generalization, 3D Geo visualization, Spatial Data Infrastructure (SDI), Open Source, Web GIS, Participatory GIS, Sensor Network, Disaster Management, Dynamic GIS, Decision Support System
- **Remote Sensing** - Oceanography, Meteorology RS, RADAR, Hyperspectral RS, Pattern and Image Processing
- **Photogrammetry** - Terrestrial laser scanning, Airborne laser scanning, Close-range, Unmanned Aerial Vehicle (UAV), Sensor Calibration and Integration, Sensor Modelling, Texture Mapping, Mobile Mapping

**Important dates (new):**
- Full paper submission (max. 6000 words): July 30, 2012
- Notification of acceptance: August 30, 2012
- Camera ready submission: September 24, 2012
- Workshop: November 7-8, 2012

**Venue:**
Faculty of Geoinformation and Real Estate
Universiti Teknologi Malaysia
81310 UTM Skudai, Johor, Malaysia

More information can be found on the workshop webpage: www.voronoi.com/geoadvances2012/

Organizer: Prof. Alias Abdul Rahman

Contact: geoadvances2012@utm.my
Conference and Program Chairs
Alias Abdul Rahman
Pawel Boguslawski
Mohamad Nor Said

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William Cartwright - RMIT University
Xiaoli Ding The - Hong Kong Polytechnic University
Yong-Cheol SUH - Pukyong National University
# Programme

**International Workshop on Geoinformation Advances**  
**UTM, Johor, Malaysia, 7–8 November 2012**

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| 09:10 – 10:30 | **Keynote presentations**

- **François Anton**
  - Hybrid Scientific Computing Using Interval Analysis, Homotopy and Algebraic Geometry for Photogrammetry, GPS and GIS
- **Thomas Kolbe, Tatjana Kutzner**
  - Latest Development in 3D City Modelling and CityGML

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| 11:00 – 13:00 | **Medical Axis Approximation of River Networks for Catchment Area Delineation**, Farid Karimipour, Mehran Ghandehari and Hugo Ledoux
  - The use of Digital Elevation Models for Watershed and Flood Hazard Mapping, Eric Forkuo and Vincent Tsawo
  - Surface Reconstruction from Noisy Sample Points by Using Voronoi/Delaunay Based Algorithm, Tang Wei Lun, Halim Bin Setan and Zulkepli Majid
  - A Methodology for Processing Raw LIDAR Data to Support Urban Flood Modelling Frameworks, Ahmad Fikri Abdullah, Zoran Vojinovic and Alias Abdul Rahman
  - Reliability of a High Accuracy Image-based System for 3D Modelling of the Medial Longitudinal Arch During Gait, Duaa Alshadli, Albert K. Chong, Kevin McDougall, Jasim Al-Baghdadi, Peter Milburn and Richard Newsham-West
  - Evaluating the Feasibility of Data Collection via GPS-Enabled Mobile Phones for Passive Household Travel Survey, Feng Mao and Minhe Ji

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  - Requirements For a Unified 3D Spatial Data Model, Edward Duncan and Alias Abdul Rahman
  - New Data Model for 3D Geoinformation in the Information Society, Wan Wen, Erik Kjems and Lars Bodum
  - Utilizing 3D Segmentation in Detecting Changes on 3D City Model Objects, Khairul Hafiz Sharkawi and Alias Abdul-Rahman
  - Representing the Dual of Objects in a Four-Dimensional GIS, Ken Arroyo Ohorí, Pawel Boguslawski and Hugo Ledoux

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| 17:00 – 18:40 | **Towards Enhancing Geometry Textures of 3D City Elements**, Behnam Alizadehashrafi and Alias Abdul Rahman
  - Towards Efficient Putrajaya 3D SDI Using Schema-aware Compressor for CityGML, Chengxi Bernad Siew and Alias Abdul Rahman
  - Examination of Compatibility Between the Croatian Land Administration System and LADM, Nikola Vučić, Miodrag Roć and Zdravko Kapović
  - Resolution Effects on Land-Cover Classification Using Varied Satellite Data, Yi Zhao and Keitarou Hara
  - The Application of InSAR Signature Time Series for Landcover Classification, Hye Won Yun, Jung Rack Kim, Yun Soo Choi and Ha Su Yoon

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Presentation Room: Building C04, 1st floor, Lecture Room 6  
Internet Room: Building C05, 1st floor, 3D GIS Lab  
Registration and Coffee Break: building C04, 1st floor, between the presentation and internet rooms  
Lunch and Dinner: please ask at the registration desk  
For those staying in hotels in Johor Bahru – a UTM bus from the Puteri Pacific hotel to UTM:  
- 1st day (Wednesday), 7:30am, return 8:30pm  
- 2nd day (Thursday), 7:30am, return 6:00pm
A. Abdul Rahman, Universiti Teknologi Malaysia, Skudai, Malaysia; P. Boguslawski, Universiti Teknologi Malaysia, Skudai, Malaysia; C. Gold, Universiti Teknologi Malaysia, Skudai, Malaysia; M.N. Said, Universiti Teknologi Malaysia, Skudai, Malaysia (Eds.)

Developments in Multidimensional Spatial Data Models

Series: Lecture Notes in Geoinformation and Cartography

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