



## *The Joint ISPRS Workshop on 3D City Modelling & Applications and the 6<sup>th</sup> 3D GeoInfo Conference*

June 26-28 2011, Wuhan, China  
<http://www.lmars.whu.edu.cn/3DCMA2011/>

### *Conference Program*

<b>Day 1 - Saturday 25th June 2011</b>	
<b>08:00 - 24:00</b>	<b>Registration at JunYi Dynasty Hotel</b>
<b>18:00 - 20:00</b> <b>JunYi Dynasty Hotel</b>	<b>Dinner</b>
<b>Day 2 - Sunday 26<sup>th</sup> June 2011</b>	
<b>08:00 - 17:00</b>	<b>On-Site-Registration at LIESMARS</b>
<b>09:00 - 09:30</b> <b>LIESMARS 211</b>	<b>Opening Ceremony and Welcome Addresses (Chair: Qing Zhu)</b> <i>Prof. Jun Chen, ISPRS Secretary General of ISPRS</i> <i>Prof. Jon Mills, president of ISPRS Technical Commission V</i> <i>Prof. Jianya Gong, director of LIESMARS</i>
<b>09:30 -10:00</b> <b>LIESMARS 211</b>	<b><i>The status and roadmap of OGC standard-CityGML</i></b> <b>Keynote Speech by Prof. Thomas H. Kolbe</b> Chair: <i>Prof. Jun Chen</i>
<b>10:00 -10:15</b> <b>LIESMARS</b>	<b><i>Group Photo and Tea Break</i></b>
<b>10:15-11:35</b> <b>LIESMARS 211</b>	<b>Session 1: 3D/4D Representation of Virtual Environment</b> Chair: <i>Prof. Sisi Zlatanova</i>  <b><i>The Context of Survival: Supporting the Man on the Spot</i></b> C.M. Gold, P. Boguslawski, A. Abdul-Rahman, Z. Li, G. Liu By <i>Prof. C.M. Gold, University of Glamorgan, UK</i>  <b><i>Towards Dynamic Virtual 3D World: Bringing Dynamics into Integrated 3D Indoor and Outdoor Virtual World</i></b> Langyue Wang, Gunho Sohn, Ravi Persad, Solomon Chan, Costas Armenakis By <i>Prof. Gunho Sohn, University of York, Canada</i>

	<p><b><i>Volume Function Data Model and Application in Describing Heterogeneous Attribute Field inside of Volume Object</i></b>  Qingyuan Li, Yang Jin, Jiarong Zheng  <i>By Prof. Qingyuan Li, Chinese Academy of Surveying &amp; Mapping, China</i></p> <p><b><i>Improving the Interoperability of 3D Models among Augmented Reality Systems: Proposal for a Meta-Model</i></b>  Alborz Zamyadi, Jacynthe Pouliot, Yvan Bedard  <i>By Alborz Zamyadi, Laval University, Canada</i></p>
<p><b>11:35-12:45</b>  <b>LIESMARS 211</b></p>	<p><b>Session 2: Challenges in 3D industry</b>  Chair: <i>Prof. Qing Zhu</i></p> <p><b><i>Technology challenges and options for high-point-density LIDAR</i></b>  Leica Geosystems  <i>By Lisa Wang, Product Manager of Airborne Survey System, Leica Geosystems</i></p> <p><b><i>Gvitech Group &amp; 3D City Services</i></b>  <i>By Felix Zhou, Global Business Director of Gvitech Technology</i></p> <p><b><i>Photo-Realistic 3D City Model</i></b>  <i>By Dr. Keetae Kim, Head of SK C&amp;C / 3D Solution</i></p>
<p><b>12:45 - 14:00</b>  <b>JunYi Dynasty Hotel</b></p>	<p><b>Lunch</b>  <b>Break</b></p>
<p><b>14:00 - 14:30</b>  <b>LIESMARS 211</b></p>	<p><b><i>Towards Intelligent 3D city models</i></b>  <b><i>Keynote Speech by Prof. Sisi Zlatanova</i></b>  Chair: <i>Prof. Thomas H. Kolbe</i></p>
<p><b>14:30 - 15:50</b>  <b>LIESMARS 211</b></p>	<p><b>Session 3: Semantics based 3D Indoor Representation and Applications</b>  Chair: <i>Prof. Thomas H. Kolbe</i></p> <p><b><i>Semantic and Topological Representation of Building Indoors: An Overview</i></b>  Bernardino Domínguez Martín, Ángel-Luis García, Francisco Feito  <i>By Bernardino Domínguez Martín, University of Jaen, Spain</i></p> <p><b><i>An Integrated Framework for Representing the Relation among Building Structure and Interior Utilities in Micro-Scale Environment</i></b>  Ihab Hijazi, Sisi Zlatanova, Manfred Ehlers  <i>By Ihab Hijazi, University of Osnabrueck, Germany</i></p> <p><b><i>Formal Definition of an User-adaptive and Length-optimal Routing</i></b></p>

	<p><b><i>Graph for Complex Indoor Environments</i></b>  Marcus Goetz, Alexander Zipf  <i>By Marcus Goetz, University of Heidelberg, Germany</i></p> <p><b><i>A BIM-Oriented Approach for Facilitating Indoor Navigation</i></b>  Umit Isikdag, Sisi Zlatanova, Jason Underwood  <i>By Prof. Umit Isikdag, Beykent University, Turkey</i></p>
<p><b>15:50 - 16:00</b>  <b>LIESMARS 211</b></p>	<p><b>Tea Break</b></p>
<p><b>16:00 - 17:20</b>  <b>LIESMARS 211</b></p>	<p><b>Session 4: Semantics based 3D City Modeling</b>  Chair: <i>Prof. Christopher M. Gold</i></p> <p><b><i>A Generic Approach for 3D SDI in The Netherlands</i></b>  Jantien Stoter, Linda van den Brink, George Vosselman, Joris Goos, Sisi Zlatanova, Edward Verbree, Rick Klooster, Leon van Berlo, Gerbrand Vestjens, Marcel Reuvers, Stefan Thorn  <i>By Prof. Sisi Zlatanova, Delft University of Technology, The Netherlands</i></p> <p><b><i>Towards Defining a Framework for the Automatic Derivation of 3D CityGML Models from Volunteered Geographic Information</i></b>  Marcus Goetz, Alexander Zipf  <i>By Marcus Goetz, University of Heidelberg, Germany</i></p> <p><b><i>Shell Model Representation as a Substitute of LoD3 for 3D Modeling in CityGML</i></b>  Hongchao Fan, Bo Mao, Jie Shen, Liqiu Meng  <i>By Hongchao Fan, Technical University of Munich, Germany</i></p> <p><b><i>Building 3D Cadastral System based on 2D Surveying Plans with Sketchup</i></b>  Shen Ying, Lin Li, Renzhong Guo  <i>By Shen Ying, Wuhan University, China</i></p>
<p><b>18:00 - 19:30</b>  <b>JunYi Dynasty Hotel</b></p>	<p><b>Welcome Dinner</b></p>
<p><b>Day 3 - Monday 27<sup>th</sup> June 2011</b></p>	
<p><b>08:00 - 17:00</b></p>	<p><b>On-Site-Registration at LIESMARS</b></p>
<p><b>9:00 - 9:30</b>  <b>LIESMARS 211</b></p>	<p><b><i>The Fourth Generation of Campus Map: A Case for Geo-spatial Cognitive Studies</i></b>  <b><i>Keynote Speech by Prof. Hui Lin</i></b>  Chair: <i>Prof. Gunho Sohn</i></p>
<p><b>9:30 - 10:50</b>  <b>LIESMARS 211</b></p>	<p><b>Session 5: 3D Data Acquisition I - Data Processing</b>  Chair: <i>Prof. Gunho Sohn</i></p>

	<p><b><i>3D Information from Close-range Photogrammetry</i></b> Jon Mills <i>By Prof. Jon Mills, Newcastle University, UK</i></p> <p><b><i>Correspondence-free Range Camera Orientation</i></b> Ben Gorte <i>By Ben Gorte, Delft University of Technology, The Netherlands</i></p> <p><b><i>Skyline-based Registration of 3D Laser Scans</i></b> Andress Nuechter, Dorit Borrmann, Stanislav Gutev, Jan Elseberg <i>By Andress Nuechter, Jacobs University Bremen gGmbH, Germany</i></p> <p><b><i>A Method for Filling Holes in Laser Scanning Data</i></b> Jiqiang Tan, Qingming Zhan, Dejiang Li <i>By Jiqiang Tan, Wuhan University, China</i></p>
<p><b>10:50 – 11:00</b> <b>LIESMARS 211</b></p>	<p><b>Tea Break</b></p>
<p><b>11:00 – 12:40</b> <b>LIESMARS 211</b></p>	<p><b>Session 6: 3D Data Acquisition II - Reconstruction</b> Chair: <i>Prof. Jon Mills</i></p> <p><b><i>Automated 3D Tree Model Reconstruction from Mobile Laser Scanning Data</i></b> Lingli Zhu, Juha Hyypä, Zhengjun Liu <i>By Lingli Zhu, Finnish Geodetic Institute, Finland</i></p> <p><b><i>Pattern Detection In Airborne Lidar Data Using Laplacian of Gaussian Filter</i></b> Qingming Zhan, Yubin Liang, Ying Cai, Yinghui Xiao <i>By Prof. Qingming Zhan, Wuhan University, China</i></p> <p><b><i>Towards a Fast and Easy Approach for Building Textured 3D Models using Smartphones</i></b> Matthieu Bach, Sylvie Daniel <i>By Prof. Jacynthe Pouliot, Laval University, Canada</i></p> <p><b><i>Building Roof Extraction from LIDAR Point Clouds Using Clustering Techniques</i></b> Jianhua Mao, Qihong Zeng, Xuefeng Liu, Rui Huang <i>By Prof. Jianhua Mao, Shanghai University, China</i></p> <p><b><i>Analysis Of Error Sources in Terrestrial Laser Scanning</i></b> Tien Thanh Nguyen, Xiuguo Liu, Hongping Wang <i>By Tien Thanh Nguyen, China University of Geosciences (Wuhan), China</i></p>
<p><b>12:40 – 14:30</b></p>	<p><b>Lunch</b></p>

<b>JunYi Dynasty Hotel</b>	
<b>14:30 - 17:30</b>	<b>Visiting “Wuhan Land Resources and Planning Bureau ”</b> <i>Technical talks by Senior Engineer: Dr. Mingjun Peng</i>
<b>18:00 – 22:00</b>	<b>Yangtze River Cruise</b>
<b>Day 4 - Tuesday 28<sup>th</sup> June 2011</b>	
<b>9:00 - 9:30</b> <b>LIESMARS 211</b>	<b><i>Image-based Modeling of Buildings</i></b> <i>Keynote speech by Prof. Long Quan</i> Chair: <i>Prof. Jacynthe Pouliot</i>
<b>9:30 – 10:30</b> <b>LIESMARS 211</b>	<b>Session 7: Geo-Infrastructures and 3D GIS Platforms</b> Chair: <i>Prof. Jacynthe Pouliot</i>  <i>GeoGlobe –New Horizon of Virtual Globe in China</i> Jianya Gong, Huayi Wu, Jing Chen, Longgang Xiang <i>By Prof. Huayi Wu, Wuhan University, China</i>  <i>Full 3D Geospatial Information System Platform GeoScope</i> Yeting Zhang, Qing Zhu, Gang Liu, Wenting Zheng, Zonghua Li, Zhiqiang Du <i>By Weiping Xu, Wuhan University, China</i>  <i>Reality-Virtuality Fusional Campus Environment An Online 3D Platform Based on OpenSimulator</i> Weitao Che, Hui Lin, Mingyuan Hu <i>By Weitao Che, The Chinese University of Hong Kong, Hong Kong, China</i>
<b>10:30 – 10:40</b> <b>LIESMARS 211</b>	<b>Tea Break</b>
<b>10:40 – 11:40</b> <b>LIESMARS 211</b>	<b>Session 8: 3D Applications on Planning and Spatial Analysis</b> Chair: <i>Prof. Qingming Zhan</i>  <i>Towards Computer-Aided Collaborative Subway Track Planning in Multi-Scale 3D City and Building Models</i> Martin Breunig, Ernst Rank, Matthaus Schilcher, Andre Borrmann, Stefan Hinz, Ralf-Peter Mundani, Yang Ji, Mathias Menninghaus, Andreas Donaubauber, Horst Steuer, Thomas Vogtle <i>By Yang Ji, Technical University of Munich, Germany</i>  <i>Talks on Geological Analysis</i> Gang Liu <i>By Prof. Gang Liu, China University of Geosciences (Wuhan), China</i>  <i>Point in Polyhedra Test with Direct Handling of Degeneracies</i> Shulin Cui, Shuqing Zhang, Xuanxi Chen, Zhenping Pang, Xiaoyang Fu <i>By Shulin Cui, Jilin University, China</i>

<p><b>11:40 – 14:00</b> JunYi Dynasty Hotel</p>	<p><b>Lunch</b></p>
<p><b>14:00 – 14:30</b> LIESMARS 211</p>	<p><i>Application of performance simulation in the planning for low carbon green city: Sanshan as a case study</i> <i>Keynote Speech by Prof. TSOU Jin-Yeu</i> Chair: <i>Prof. Hui Lin</i></p>
<p><b>14:30 – 15:50</b> LIESMARS 211</p>	<p><b>Session 9: 3D Applications on Emergency Management</b> Chair: <i>Prof. Hui Lin</i></p> <p><i>Bioterrorism Simulation and Risk Assessment in 3D Micro-Spatial Environments</i> Jianhua Gong, Yiquan Song, Lei Zhang, Tao Xu, Jieping Zhou, Jinjin Zhang, Yapin Li, Liqun Fang, Wuchun Cao <i>By Prof. Jianhua Gong, Institute of Remote Sensing Applications, Chinese Academy of Sciences, China</i></p> <p><i>Construction of Risk Assessment System of Dam-break in Barrier Lake Based on Collaborative Workflow</i> Song Ma, Jun Zhu, Ya Hu <i>By Song Ma, Southwest Jiaotong University, China</i></p> <p><i>Semantic Enhancement of a Virtual Reality Simulation System for Fire Fighting</i> Aitor Moreno, Sisi Zlatanova, Bénédicte Bucher, Jorge Posada, Carlos Toro, Alejandro García-Alonso <i>By Aitor Moreno, Vicomtech, Spain</i></p> <p><i>Toward Seamless Indoor-Outdoor Applications: Developing Stakeholder-oriented Location-based Services</i> Kohei Ogawa, Edward Verbee, Sisi Zlatanova, Naohiko Kohtake, Yoshiaki Ohkami <i>By Kohei Ogawa, Keio University, Japan</i></p>
<p><b>15:50 – 16:50</b> LIESMARS 211</p>	<p><b>Session 10: 3D Visualization</b> Chair: <i>Prof. Qingyuan Li</i></p> <p><i>The Study on Large Scale City 3D Scene Rendering</i> Yang Zhou, Qing Xu, Kun Xu, Chaozhen Lan <i>By Kun Xu, The PLA Information Engineering University, China</i></p> <p><i>Debris Flow Simulation-oriented Three-dimensional Scenery Modeling and Rendering</i> Jian Ye, Jiayuan Lin, Heping Tao, Xiaoqing Chen, Jingxiong Chen <i>By Jian Ye, Institute of Mountain Hazards and Environment, Chinese Academy of Sciences, China</i></p>

	<p><i>Talks on Visualization</i></p> <p>Wenting Zheng</p> <p><i>By Prof. Wenting Zheng, Zhejiang University, China</i></p>
<p><b>16:50 - 17:00</b></p> <p><b>LIESMARS 211</b></p>	<p><b>Tea Break</b></p>
<p><b>17:00 - 17:30</b></p> <p><b>LIESMARS 211</b></p>	<p><b>Closing Plenary</b></p> <p>Chair: <i>Prof. Hui Lin and Prof. Qing Zhu</i></p>
<p><b>17:30-17:45</b></p> <p><b>LIESMARS 211</b></p>	<p><b>Welcome speech by the host of the 7<sup>th</sup> 3D GeoInfo conference</b></p> <p><i>By Prof. Jacynthe Pouliot, Laval University, Canada</i></p>
<p><b>18:00 – 20:00</b></p> <p><b>JunYi Dynasty Hotel</b></p>	<p><b>Dinner</b></p>