

## The 27th International Conference on Geoinformatics

<b>Monday, 1st July 2019</b>	
<b>15:00 – 18:00</b>	<b>Registration Opens</b>
<b>18:00 – 20:30</b>	<b>Welcome Reception</b> ( <a href="#">Marble Bar</a> , <a href="#">Hilton Hotel</a> )

## The 27th International Conference on Geoinformatics

<b>Tuesday, 2nd July 2019</b>	
<b>8:30 – 9:00</b>	<b>Opening Ceremony</b>
<b>9:00 – 10:20</b>	<p><b>Keynote Session 1 (40 minutes each) Chairman:</b> Changshan Wu</p> <p><b>Geo-Social Sensing for Urban Study and Social Management</b>          Prof. Jianya Gong  <i>School of Remote Sensing and Information Engineering, Wuhan University          Wuhan, China</i></p> <p><b>Geographic Language Evolution and Human Geographic Studies</b>          Prof. Hui Lin  <i>The Chinese University of Hong Kong, Hong Kong, China</i></p>
<b>10:20 – 10:40</b>	<b>Tea/Coffee Break</b>
<b>10:40 – 12:40</b>	<p><b>Presentation Session 1 Social Sensing, GIS and Transportation</b>  <b>Chairman:</b> Xun Shi</p> <p><b>Paper ID: C-11053</b>          The Missing Parts from Social Media Enabled Smart Cities: Who, Where, When, and What  <i>Yihong Yuan, Yongmei Lu, Edwin T. Chow, Chao Ye, Abdullatif Alyaqout, and Yu Liu          Texas State University, USA</i></p> <p><b>Paper ID: C1105</b>          Visualized Analysis of Short and Long-Distance Human Mobility on the Qinghai-Tibetan Plateau with Crowd Sourcing Data  <i>Jun Xu, Chinese Academy of Sciences, China</i></p>

<p><b>10:40 – 12:40</b></p> <p><b>2 July 2019</b></p>	<p><b>Paper ID: C1107</b> Research on Quality Evaluation Method of OpenStreetMap Road Network Data Based on Remote Sensing Image <i>Haigang Sui, Wuhan University, China</i></p> <p><b>Paper ID: C11048</b> Intelligent processing of social sensing data to assist rapid disaster response and mitigation <i>Jibo Xie, Chinese Academy of Sciences, China</i></p> <p><b>Paper ID: C11013</b> Modeling of Communicable Disease Transmissions with Real Human Mobility and Disease Data <i>Meifang Li, Yu Liu, Xia Li, Xun Shi Dartmouth College, USA</i></p> <p><b>Paper ID: C11029</b> MindReader: A Knowledge-graph-aware Personalized Travel Recommendation System <i>Jialing Gao, Feng Lu, Peiyuan Qiu, Chinese Academy of Sciences, China</i></p> <p><b>Paper ID: C11046</b> Evaluation of Comprehensive Transport Superiority in the Core Area of Changsha-Zhuzhou-Xiangtan Urban Agglomeration Based on Big Data <i>Jun Fang, Chaokui LI, Wentao Yang, Keyan Xiao, Qinglan Zhou Hunan University of Science and Technology, China</i></p> <p><b>Paper ID: C11035</b> Flow-weighted Graph Convolution Recurrent Network for Short-term Traffic Speeds Forecasting <i>Jun Cao, Xuefeng Guan, Na Zhang, Huayi Wu Wuhan University, China</i></p> <p><b>Paper ID: C11062</b> Extracting Road Turns And Intersections From Low Frequency GPS Trajectory data <i>Caili Zhang, Longgang Xiang, Wuhan University, China</i></p>
<p><b>12:40 – 13:30</b></p>	<p><b>Lunch break</b></p>
<p><b>13:30 – 15:30</b></p>	<p><b>Keynote Session 2 (40 minutes each) Chairman: Qiming Zhou</b></p> <p><b>Spatial Prediction and Laws of Geography</b> Prof. A-Xing Zhu <i>Department of Geography, University of Wisconsin-Madison Madison, Wisconsin, USA</i></p> <p><b>Smart Data for Connected Gardens</b> Denise Ora <i>Executive Director Botanic Gardens &amp; Centennial Parklands</i></p>

	<p><b>Remote Sensing and Predicting Earth's Water: Progress, Challenges and Opportunities</b>  Prof. Yang Hong  <i>Peking University, Beijing, China</i></p>
15:30 – 15:50	<b>Afternoon Tea/Coffee Break</b>
15:50 – 18:05 2 July 2019	<p><b>Presentation Session 2: Remote Sensing of Physical Environments</b>  <b>Chairman:</b> Qiming Zhou</p> <p><b>Paper ID: C1103</b>  Hydrological droughts measurement using GRACE satellite solution  <i>Aihong Cui, Jianfeng Li, Qiming Zhou, Guofeng Wu, Qingquan Li</i>  <i>Hong Kong Baptist University, China</i></p> <p><b>Paper ID: C11016</b>  Study on Coordinative Observation Technology for High Altitude Barrier Lakes  <i>Xin Zhang, Chinese Academy of Sciences, China</i></p> <p><b>Paper ID: C11023</b>  The Continuous Monitoring and Instant Service Method for Flood Events under the Sensor Web Environment  <i>Wenying Du, Nengcheng Chen, Wuhan University, China</i></p>
15:50 – 17:50 2 July 2019	<p><b>Paper ID: C11052</b>  GIS Application in Watershed Processes Study  <i>Shixiong Hu, Mengya Jia</i>  <i>East Stroudsburg University of PA, USA</i></p> <p><b>Paper ID: C11056</b>  UAV-based high spatial resolution monitoring and estimation of soil moisture status in a grape vineyard  <i>Tao Tang, Michael Radomski and Michael Stefan</i>  <i>State University of New York - College at Buffalo, USA</i></p> <p><b>Paper ID: C11057</b>  Urban flood risk assessment and zoning in road environments: a case study of the Chang-Zhu-Tan Urban Agglomeration, China  <i>Shuang Yao, Nengcheng Chen, Chao Wang, Wenying Du</i>  <i>Wuhan University, China</i></p> <p><b>Paper ID: C11025</b>  Mapping 10-m forest type area in Southern China with temporal-spatial-spectral features derived from Sentinel-2 time series images on the Google Earth Engine  <i>Kai Cheng, Juangle Wang, Chinese Academy of Sciences, China</i></p>

	<p><b>Paper ID: C1102</b>  Population Spatial Distribution Geo-simulation in the Future to Support Beijing General Urban Planning (2016-2035) Based on CA-Markov Model  <i>Fang Liu, Weilun Sun</i>  <i>Beijing University of Civil Eng. &amp; Architecture, China</i></p>
<p><b>17:50 – 18:30</b></p>	<p style="text-align: center;">Break  <b>Conference Bus Departs at 18:10</b></p>
<p><b>18:30 – 22:00</b></p> <p>2 July 2019</p>	<p style="text-align: center;"><b>Keynote and Panel Discussion Sessions, Award Function Dinner</b></p> <p><b>Keynote Speech (40 minutes)</b>  Prof. Daniel Sui  Professor of Geography  Vice Chancellor for Research and Innovation  University of Arkansas, USA</p> <p><b>Panel Discussion Session (40 minutes)</b>  Topic: GIS in Higher Education  <b>Chairman:</b> Professor Yongmei Lu, Texas State University, USA</p> <p><b>Awards Session</b></p> <p><b>CPGIS Awards</b>  <b>Chairman:</b> Professor Hui Lin, The Chinese University of Hong Kong</p> <p><b>GARF Awards</b>  <b>Chairman:</b> Chris Tsioulos, Director CMT Architects Australia</p>

## Wednesday, 3rd July 2019

**8:30 – 10:30**  
3 July 2019

### **Session 3: GIS and Planning**

**Chairman:** Junxiang Zhu

**Paper ID: C1101**

BIM/GIS Integration for Web GIS Based Bridge Management

*Junxiang Zhu, Yi Tan, Xiangyu Wang, Jun Wang*

*Curtin University, Australia*

**Paper ID: C11015**

Urban Expansion Simulation and Scenario Analysis in Major Cities of Central Asia

*Jing Qian, Qiming Zhou, Xi Chen, Shuhong Peng, Bo Sun*

*Chinese Academy of Sciences, China*

**Paper IDs: C11020**

Based on the energy analysis of cultivated land resource sustainable utilization evaluation in Wuhan city

*Lin Zhu, Huazhong Agricultural University, China*

**Paper IDs: C11022**

The amenity value of of lake landscape in urban residential areas: estimates from a hedonic pricing model for Donghu

*Rongxuan Yang*

*Huazhong Agricultural University, China*

**Paper ID: C11065**

The Spatial Pattern Study on Catering Industry based on Open Source Big Data in Beijing Central Urban Area

*Li Mei, Peking University, China*

**Paper IDs: C11027**

Spatial-temporal Evolution and Influence Factors of Service Industry of Country-Level in Henan province from 2006 to 2016

*Hejia Fan*

*East China Normal University, China*

**Paper IDs: C11030**

Estimating Ground PM2.5 Concentration Using Spatial Varying Coefficient (SVC) Model

*Huangyuan Tan, Yumin Chen, Jingyi Zhang, Jiping Cao, Tao Fang*

*Wuhan University, China*

**Paper IDs: C11031**

Analysis of spatial disparities in health care accessibility: the comparison between the central part of two typical cities in China

*Meijie Chen, Yumin Chen, Fenglan Luo, Liheng Huang, Jiaying Liao*

*Wuhan University, China*

	<p><b>Paper IDm: C11032</b> Exploring the Spatial Segregation of New Migrants Based on Activity Space: A Big Data Approach <i>Qili Gao, Yang Yue; Qingquan Li</i> <i>Wuhan University, China</i></p> <p><b>ID: C-11063</b> A reconstruction method based on homonymy point index table of three views <i>Hongrui Zhao, Wenjia Wu, Dongming Huang</i> <i>Tsinghua University, China</i></p> <p><b>Session 3a: ICITA</b> <b>Chairman:</b> Errol Chopping</p> <p><b>Paper ID: ICITA-12011 (invited paper)</b> Automated Seismic Data Processing using Deep Learning Networks <i>M. Deriche, H. Nuha, M. Alfarhan, M. Mohandes, A. Maalej</i> <i>King Fahd University of Petroleum and Minerals, KFUPM, Saudi Arabia</i></p> <p><b>Paper ID: ICITA-12012</b> A Concentric Cyber Security Zone Model <i>Christopher J. Pavlovski, Kheli Koh, Leslie Nagy, and Andrew Gontarczyk</i> <i>Commonwealth Bank of Australia / Cyber Security, Australia</i></p> <p><b>Paper ID: ICITA-12009</b> User's Intention to Purchase Mobile Games Application from Consumption Value Perspective <i>Ili Hawa Ahmad, Ab Razak Che Hussin, and Norshidah Mohamed</i> <i>Prince Sultan University, Saudi Arabia</i></p> <p><b>Paper ID: ICITA-12010</b> An Analysis of Evaluation Metrics of GANs <i>Ili Hawa Ahmad, Ab Razak Che Hussin, and Norshidah Mohamed</i> <i>King Khalid University, Saudi Arabia</i></p> <p><b>ID: ICITA-12013</b> Surface Region Decomposition for B-rep Model <i>Dong Yan, Xu Jing, and Li Mei</i> <i>University of Shaoxing, China</i></p>
<b>10:30 – 10:40</b>	<b>Tea/Coffee Break</b>
	<p><b>Session 4: Remote Sensing of Physical &amp; Urban Environments</b> <b>Chairman:</b> Huiping Liu</p> <p><b>Paper IDs: C11044</b> Calculated River Flow Attenuation Base of Ungauged Catchments in the Taklamakan Desert <i>Juan Wang, Huiping Liu</i> <i>Beijing Normal University, China</i></p>

**10:40 – 12:40**  
**3 July 2019**

**Paper IDs: C11061**

BeiDou satellite navigation simulation system on the CesiumJS virtual globe platform

*Xinlan Chen, East China Normal University, China*

**Paper IDs: C11041**

Remote Sensing Classification Method of Vegetation Based on Mountain Altitude Belts

*Junyao Zhang, Yonghui Yao, Dongzhu Suonan*

*Chinese Academy of Sciences, China*

**Paper IDs: C11058**

How deeply the vegetation physiology effects due to increasing CO2 impact the terrestrial future hydrologic cycle over China?

*Gaoyun Shen, Nengcheng Chen, Zeqiang Chen, Wei Wang*

*Wuhan University, China*

**Paper ID: C1108**

A new dmsp/ols night time light data desaturation method based on NDBI and MNDWI

*Yuqian Wang, Chengpeng Huang, Kuan Qian, Xiaolong Li, Yongbin Tan and Penggen Cheng*

*East China University of Technology, China*

**Paper ID: C11012**

A Study on the Spatial-temporal Pattern and Future Development Trend of Anthropogenic Heat Emission in Jiangsu Province

*Lingyan Weng, Xugao Han*

*Nanjing University Jinling College, China*

**Paper ID: C11014**

Facade feature extraction method for buildings from three-dimensional point cloud data assisted by optical images

*Yongzhi Wang, Yuqing Ma, A-xing Zhu, Hui Zhao, Sijing Zhu*

*Jiangxi University of Science and Technology, China*

**Paper ID: C-11018**

Spatial analysis of light pollution at street scale with LJ1-01 nighttime light remote sensing and mobile big data

*Bo Sun, Qiming Zhou, Yang Zhang, Peng Wang*

*Chinese Academy of Sciences, China*

**Paper ID: C11067**

The research of support vector machine (SVM) based on particle swarm optimization in remote sensing image classification

*Yi Zhang, East China Normal University, China*

	<p><b>Paper ID: C11028</b>  Statistical downscaling simulation of precipitation in the data-scarce Tianshan Mountains, northwest China based on the Earth system data products  <i>Mengtian Fan, Jianhua Xu, East China Normal University, China</i></p>
<b>12:40 – 13:30</b>	Lunch break
<b>13:30 – 15:30</b> <b>3 July 2019</b>	<p><b>Session 5: Remote Sensing of Urban Environments</b>  <b>Chairman:</b> Qinghua Guo &amp; Changshan Wu</p> <p><b>Paper ID: C1106</b>  Understanding urban habitability in a 3D perspective based on Mobile Lidar data  <i>Jing Zhang, QinghuaGuo, Xiliang Sun, Yanjun Su</i>  <i>Chinese Academy of Sciences, China</i></p> <p><b>Paper ID: C11037</b>  Research on coupling and integrating Model-3 models for Air Pollution Simulation  <i>Lingshan Wang, Min Chen, Yongning Wen, Songsan Yue</i>  <i>School of Geography Nanjing Normal University, China</i></p> <p><b>Paper ID: C11021</b>  Evaluation of the urban landscape structures and dynamics of Hawassa City, using satellite images and spatial metrics approaches, Ethiopia  <i>Berhanu Terfa</i>  <i>Wuhan University, China</i></p> <p><b>Paper ID: C11054</b>  Semi-Automatic Image Classification based on Transfer Learning  <i>Haiping Yang</i>  <i>Zhejiang University of Technology, China</i></p> <p><b>Paper ID: C11055</b>  A two-step scheme for mapping regional high resolution urban impervious surface  <i>Min Huang, Nengcheng Chen, Xiang Zhang</i>  <i>Wuhan University, China</i></p> <p><b>Paper ID: C11019</b>  Urban land use classification from very high resolution remote sensing imagery  <i>Changshan Wu, University of Wisconsin-Milwaukee, USA</i></p> <p><b>Paper ID: C11049</b>  Unsupervised Representation Learning with GANs for Remote Sensing Images  <i>Wenxuan Liu, Huayi Wu, Wuhan University, China</i></p>



	<p><b>Paper ID: C11050</b>  Statistical distribution of nonzero spatial autocorrelation parameter of a Simultaneous Autoregressive Model and its applications  <i>Qing Luo, Daniel A. Griffith, Huayi Wu</i>  Wuhan University, China</p>
<p><b>15:30-15:40</b></p>	<p>After tea/coffee break</p>
<p><b>15:40 – 18:10</b>  <b>3 July 2019</b></p>	<p><b>Presentation Session 6: GIS Modeling and WebGIS</b>  <b>Chairman: Cheng-Zhi Qin</b></p> <p><b>Paper ID: C1104</b>  Automatically selecting environmental covariates for geographical variable mapping based on existing application cases – Taking digital soil mapping domain as example  <b>Cheng-Zhi Qin, Peng Liang, A-Xing Zhu</b>  Chinese Academy of Sciences, China</p> <p><b>Paper ID: C11064</b>  Research on vector tile map construction with data equalization principle  <i>Mei Li, Ying Su, Ning Zhi, Yanxin Sun, Shanjun Mao</i>  Peking University, China</p> <p><b>Paper ID: C11066</b>  Mining Applications and Techniques from GIS Articles  <i>Li Yu, Li Qian, Caihong Deng, Zhipeng Dong</i>  National Science Library, Chinese Academy of Sciences, Beijing, China</p> <p><b>Paper ID: C11038</b>  Preliminary Study on Network Collaboration Mode Oriented to Geographic Modeling and Simulation  <i>Yuchen Lu, Yongning Wen, Zaiyang Ma</i>  School of Geography Nanjing Normal University, China</p> <p><b>Paper ID: C11039</b>  A Parallel Computing Paradigm for Geo-analysis Models in the Distributed Web Environment  <i>Ming Wang, Min Chen, Songshan Yue</i>  School of Geography Nanjing Normal University, China</p> <p><b>Paper ID: C11036</b>  Research on the Construction Method of the Service-Oriented Web-SWMM System  <i>Dawei Jiao, Min Chen, Yongning Wen, Songshan Yue</i>  School of Geography Nanjing Normal University, China</p>

<p><b>15:40 – 18:10</b> <b>3 July 2019</b></p>	<p><b>Paper ID: C11068</b> Permutation-test-based Clustering Method for Detection of Dynamic Patterns in Spatio-temporal Datasets <i>QiLiang Liu, Wenkai Liu, Jianbo Tang, Min Deng, Yaolin Liu</i> <i>Department of Geo-informatics, Central South University, Changsha, Hunan, China</i></p> <p><b>Paper ID: C11024</b> Knowledge-based Interactive Workflow Engine of Collaborative Geographic Simulation <i>Yuting Chen, Hui Lin</i> <i>The Chinese University of Hong Kong, China</i></p> <p><b>Paper ID: C11034</b> Multi-granular POIs identification from trajectories using hierarchical GMM-RF model on Web Map Service Platforms <i>Guangsheng Dong, Rui Li, Huayi Wu, Ru Li</i> <i>Wuhan University, China</i></p> <p><b>ID: C-11043</b> Comparative study on the mountain elevation effect of the Tibetan Plateau and the Alps and their implications for alpine tree lines <i>Dongzhu Suonan, Yonghui Yao, Junyao Zhang</i> <i>Chinese Academy of Sciences, China</i></p> <p><b>ID: C-11091</b> Influence of short wave albedo on soil surface temperature of bare farmland: a case study from Nanyang Basin, China <i>Pengcheng Qi, Rui Li, Shixiong Hu, Yan Cui</i> <i>Nanyang Normal University, China</i></p>
<p><b>18:10 – 19:00</b></p>	<p style="text-align: center;"><b>Break</b> <b>Walking to the Gala Dinner Venue takes about 5 minutes</b></p>
<p><b>19:00 – 23:00</b></p>	<p><b>Panel Discussion Session 2 (40 minutes each)</b> <b>Chairman:</b> Professor Xun Shi, Dartmouth College, USA <b>Topic:</b> “Big” data and “small” data in geospatial analysis.</p> <p><b>Conference Gala Dinner</b></p>

<p><b>Thursday – Sunday, 4 – 7 July 2019</b></p>	
	<p><b>Field Trips</b></p>
	<p><b>Detail in Special Field Trips</b> <i>(Tickets are required)</i></p>