Asia GIS Conference 2017
Future Smart Cities

Programme

5-7 January 2017
The University of Hong Kong
Hong Kong

ASIA GIS CONFERENCE 2017
5-7 January 2017 | Hong Kong Geographic Information System Association

Organisers

Asia GIS Association

Hong Kong GIS Association

Centre of Urban Studies and Urban Planning, HKUrbanLab, The University of Hong Kong

GIS/Land Information System Research Centre, HKU

Co-organiser

Smart City Consortium

International Supporting Organisations

International Federation of Surveyors (FIG) Commission 3 Spatial Management Information

International Geographical Union (IGU) Commission on Geographical Information Science

Supporting Organisations

Department of Geography, Hong Kong Baptist University

Department of Land Surveying and Geo-Informatics, The Hong Kong Polytechnic University

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Qiming ZHOU
Hong Kong Baptist University, Hong Kong, HKSAR China

Foreword - Welcome Message from the President

Dear Friends and Guests,

It is our great pleasure to welcome you to the Asia GIS Conference 2017 with the theme of "Future Smart Cities" which will be held in Hong Kong from 5th to 7th January 2017. This conference is organised by the Asia GIS Association (AGISA), the Hong Kong GIS Association (HKGISA), the Centre of Urban Studies and Urban Planning, HKUrbanLab and the GIS Research Centre of the University of Hong Kong. The Asia GIS Conference was first held in Hong Kong in 1994. Since then, it has been held in Bangkok, Taipei, Tokyo, Wuhan, Johor Bahru, Busan, Kaohsiung, and Chiang Mai. It is coming back to Hong Kong after 22 years.

The Asia GIS Association was founded in the 5th Asia GIS Conference that was held in Wuhan in 2003. It is a non-profit and non-political organization that aims to 1) provide a forum to promote teaching, research, development, and applications of GIS and its related technology in Asia; 2) networking of people in the teaching, research, development and applications of GIS in Asia; 3) encourage the conduct of collaborative research and dissemination of its results by researchers and professionals in GIS in Asia; and 4) encourage the development of and provision for the dissemination of information on new and improved methods of GIS in Asia.

Smart cities have existed for quite some time and they are at different stages of development in different cities in Asia. Despite the increasing importance of cyber space, people still live, work, shop, and play in physical space. GIS is the tool and database for the record, analysis, management and planning of physical space for smarter sustainable cities. The objective of the Conference is to provide a forum to share the research and applications of the use of GIS in the development of smart cities as well as to discuss the use GIS for the development of future smart cities which can improve the livelihood of people in future cities.

I look forward to welcoming and meeting you in Hong Kong.

Prof. Anthony Yeh
President, Asia GIS Association

Foreword - Welcome Message from the Conference Chair

Dear Friends and Guests,

The Hong Kong Geographic Information System Association is honoured to organize this bi-annual Conference for the Asia GIS Association. I am pleased to announce that the preparation work for the Conference is in full swing in all fronts.

The theme chosen this year for the Conference is "Future Smart Cities". This is a most befitting theme as smart cities, which extensively apply the GIS technology, are springing up here and there so there will be plenty of success stories and precious experiences to be shared. The Conference will also become a forum for brainstorming the way forward into the future on how to build a sustainable smart city and to reap the full benefits of GIS.

It is indeed our pleasure for having Prof. Deren LI and Prof. Michael BATTY, world renowned scholars in GIS and Smart City, who will deliver keynote speeches on contemporary topics, and there will be plenty of technical papers providing insight into various subjects. In the venue, there will be exhibitors rolling out their cutting-edge technology and equipment which will further enrich the usefulness of GIS and its applications in future smart cities.

There will also be social programme and enlightening technical visits for delegates and their accompany persons to relax and have a closer look at Hong Kong. It is anticipated that there will be hundreds of delegates from Asia and other countries around the world in attending this Conference.

We are endeavouring to make this Conference a memorable, rewarding and enjoyable event for everyone of you.

Looking forward to seeing you at the Conference in January 2017.

Winnie SHIU
Chair
Organising Committee of Asia GIS Conference 2017

Asia GIS Association
www.asiagis.org

The Asia GIS Conference was first held in Hong Kong in 1994. Since then, it has been held in Bangkok, Taipei, Tokyo, Wuhan, Johor Bahru, Busan, Kaohsiung, and Chiang Mai. After the Asia GIS 2001 Conference in Tokyo, China hosted the Asia GIS 2003 Conference which was held in Wuhan, China, from 16-18 October 2003. In addition to GIS scholars and experts in the Asia-Pacific region, well-known international scholars were invited to deliver thematic lectures. Year by year the conferences grew in attendance, number of exhibits, and the variety and number of sessions. It became apparent that the biannual conference had grown too large to be handled in the somewhat informal way we were following. A group of people who have been active in putting on the conferences met and agreed to take a more formal approach. Thus was born the Asia GIS Association (AGISA), incorporated as a non-for-profit professional association.

Executive Committee 2014-2016

Past President:
Prof. Chih-Hong SUN, National Taiwan University, Taipei, Chinese Taipei

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Programme At-a-Glance

	4 JANUARY	5 JANUARY		6 JANUARY		7 JANUARY
0830		**REGISTRATION** 8:30 – 9:00 (2/F, Foyer of Rayson Huang Theatre)		**REGISTRATION** 8:30 – 9:00 (2/F, Foyer of Rayson Huang Theatre)		
0900						
0930		**OPENING CEREMONY** 9:00 – 10:00 (Rayson Huang Theatre)		9:00 – 10:30 (Runme Shaw Building)	**PARALLEL SESSION**	
1000					RS202: S2.1 – Smartphone, Crowdsourcing, and GIS	**TECHNICAL TOUR** Energizing Kowloon East Office and Kai Tak Cruise Terminal (9:00 – 14:00)
1030					RS203: S2.2 – GIS for Transportation Applications	
		TEA AND COFFEE 10:00 – 10:30 (Run Run Shaw Podium)			RS204: S2.3 – Cartography, Visualization and GIS	
					RS205: S2.4 – GIS Analysis of Accessibility	
		KEYNOTE SPEECH 10:30 – 12:30 (Rayson Huang Theatre)		**TEA AND COFFEE** 10:30 – 11:00 (Run Run Shaw Podium)		
1100				11:00 – 12:30 (Runme Shaw Building)	**PARALLEL SESSION**	
1130		**Professor Michael BATTY** *Fellow of Royal Society Professor, The Bartlett School of Planning, University College London*			RS202: S3.1 – GIS and Geo-Simulation	
1200		**Professor Deren LI** *Academician, Chinese Academy of Sciences Academician, Chinese Academy of Engineering Wuhan University*			RS203: S3.2 – GIS Analysis of Social Media Data	
1230					RS204: S3.3 – Urban Spatial Structures	
					RS205: S3.4 – Spatiotemporal Analysis and Modeling I	
1300		**LUNCH** 12:30 – 14:00 (Runme Shaw Building)		**LUNCH** 12:30 – 14:00 (Runme Shaw Building)		
1330						
1400						
		TECHNOLOGY SHARING SESSION		14:00 – 15:30 (Runme Shaw Building)	**PARALLEL SESSION**	
1430			AECOM Asia Co. Ltd.		RS202: S4.1 – High Performance Computing and Cyber GIS	
1500	**REGISTRATION** 14:30 – 17:30 (2/F, Foyer of Rayson Huang Theatre)	14:00 – 16:00 (Rayson Huang Theatre)	Esri China (Hong Kong) Ltd.		RS203: S4.2 – Advances in Spatial Data Handling	
			Global Virtual Design & Construction Ltd.		RS204: S4.3 – Data Quality and Management	
1530			Microsoft Hong Kong Ltd.			
			SuperMap Software Co. Ltd.	**TEA AND COFFEE** 15:30 – 16:00 (Run Run Shaw Podium)		
1600			Wuda Geoinfomatics Co. Ltd.			
		TEA AND COFFEE 16:00 – 16:30 (Run Run Shaw Podium)		16:00 – 17:30 (Runme Shaw Building)	**PARALLEL SESSION**	
1630					RS202: S5.1 – GIS and Environmental Applications	
1700		16:30 – 18:00 (Runme Shaw Building)	**PARALLEL SESSION**		RS203: S5.2 – Spatiotemporal Analysis and Modeling II	
			RS202: S1.1 – Monitoring Land Use		RS204: S5.3 – GIS and Sustainable Cities	
1730			RS203: S1.2 – GIS and Smart Cities			
			RS204: S1.3 – Public GIS	**CLOSING CEREMONY / AGISA GENERAL ASSEMBLY & COUNCIL MEETING**		
1800			RS205: S1.4 – GIS for Urban and Regional Development			
1830 Onwards		BREAK				
		CONFERENCE DINNER (Lecture Hall II, Centennial Campus) (18:30 - 21:15)				

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Programme

5 January 2017, Thursday

9:00 – 10:00：OPENING CEREMONY (Rayson Huang Theatre)

Guest of Honour:

The Hon. Nicholas W. YANG
Secretary for Innovation and Technology, HKSAR Government

10:00 – 10:30：TEA AND COFFEE (Run Run Shaw Podium)

10:30 – 12:30：KEYNOTE SPEECH (Rayson Huang Theatre)

Keynote Speakers:

Professor Michael BATTY
Fellow of Royal Society
Professor, The Bartlett School of Planning, University College London, London, UK

Professor Deren LI
Academician, Chinese Academy of Sciences
Academician, Chinese Academy of Engineering
Wuhan University, Wuhan, China

12:30 – 14:00：LUNCH　(RS202-205, Runme Shaw Building)

14:00 – 16:00：TECHNOLOGY SHARING SESSION　(Rayson Huang Theatre)

16:00 – 16:30：TEA AND COFFEE　(Run Run Shaw Podium)

5 January 2017, Thursday 16:30 – 18:00
S1.1 – Monitoring Land Use (RS202, Runme Shaw Building)

Chair: Prof. Xia LI, *Sun Yat-sen University, Guangzhou, China*

Detecting the Dynamics of Ecological Change in the Largest Wetland of Bangladesh: GIS and Remote Sensing based Approach
Mst Ilme FARIDATUL, Bo WU (*Department of Land Surveying and Geo-Informatics, The Hong Kong Polytechnic University, Hong Kong, HKSAR China*); Md Ali RAHMAT (*Department of Urban and Regional Planning, Rajshahi University of Engineering & Technology, Rajshahi, Bangladesh*)

A Global Land-use and Land-cover Change Product at a 1-km Resolution for 2010-2100
Xia LI, Guangzhao CHEN, Xiaoping LIU, Xun LIANG, Shaojian WANG, Yimin CHEN (*School of Geography and Planning, Sun Yat-sen University, Guangzhou, China*); Fengsong PEI (*Jiangsu Normal University, Xuzhou, China*); Xiaocong XU (*School of Geography and Planning, Sun Yat-sen University, Guangzhou, China*)

Urban Design and Civil Construction Assessment based on Time-Series Observations of Subsidences and Land Cover Changes in East Java, Indonesia
Arliandy Pratama ARBAD, Wataru TAKEUCHI, Virgus Ari SONDANG (*Institute of Industrial Science, The University of Tokyo, Tokyo, Japan*); Ridwan Ageng ASHARI (*Department of Geodesy and Geomatic, Gadjah Mada University, Yogyakarta, Indonesia*); Aldissain JURIZAT, (*Department of Architecture, Bandung Institute of Technology, Bandung, Indonesia*); Ankavisi NALARALAGI (*Department of Civil Engineering, Lampung University, Lampung, Indonesia*)

Monthly Monitoring of Urban Construction Land Expansion using Polarimetric SAR Imagery
Zhixin QI (*Sun Yat-sen University, Guangzhou, China*); Anthony G.O. YEH (*The University of Hong Kong, Hong Kong, HKSAR China*)

5 January 2017, Thursday 16:30 – 18:00
S1.2 – GIS and Smart Cities (RS203, Runme Shaw Building)

Chair: Prof. Wenzhong SHI, *The Hong Kong Polytechnic University, Hong Kong, HKSAR China*

Analysis of the Social Conflicts in Sawangan Depok Indonesia as an Efforts Towards Depok Smart City
M.Si Dewi SUSILONINGTYAS; M.Si Ratri CANDRA RESTUTI (*Department of Geography, Faculty of Mathematics and Natural Science, Universitas Indonesia, Depok, Indonesia*)

Managing Spatial Data in a Smart City
Victor Wai Tak NG (*Lands Department, HKSAR Government, Hong Kong, HKSAR China*)

Smart City Development: The Untold Story
Silas K.M. LIU, T.W. NG (*Planning Department, HKSAR Government, Hong Kong, HKSAR China*)

Urban Informatics
Wenzhong SHI (*Department of Land Surveying and Geo-Informatics, The Hong Kong Polytechnic University, Hong Kong, HKSAR China*)

5 January 2017, Friday 16:30 – 18:00
S1.3 – Public GIS (RS204, Runme Shaw Building)

Chair: Prof. John WILSON, *University of Southern California, Los Angeles, USA*

Looking through Geoportal Services in Asian Countries: Case Studies in Indonesia and Japan
Tandang Yuliadi Dwi PUTRA (*Institute of Industrial Science, The University of Tokyo, Tokyo, Japan*); Ryosuke SHIBASAKI (*Center for Spatial Information Science, The University of Tokyo, Tokyo, Japan*)

Protection of Our Countryside with 3D Planning Control
T.W. NG, Coway K.H. CHAN, Ben, K.K. FAN (*Planning Department, HKSAR Government, Hong Kong, HKSAR China*)

Towards a Standardized Cadastre System based on LADM: A Case Studies in Taiwan
Jung-Hong HONG, Yu-Shao WANG, Yu-Ting SU (*Department of Geomatics, National Cheng Kung University, Tainan, Chinese Taipei*)

GIS for Slope Maintenance in Public Housing Estates, Hong Kong
Danny Kwok Chuen CHUNG, Steve Ho Mo CHAN (*Housing Department, HKSAR Government, Hong Kong, HKSAR China*)

5 January 2017, Thursday 16:30 – 18:00
S1.4 – GIS for Urban and Regional Development (RS205, Runme Shaw Building)

Chair: Prof. Qiming ZHOU, *Hong Kong Baptist University, Hong Kong, HKSAR China*

Mapping and Evaluation the Process and Pattern of Urban Scaling Law in China
Hongrui ZHAO, Wenjia WU, Shulong JIANG (*Institute of Geomatics, Department of Civil Engineering, Tsinghua University, Beijing, China*)

Evaluation and Analysis on the Livability of Residential Communities in Ningbo, China
Yaolin LIU, Xiaojin LIANG (*School of Resource and Environmental Sciences, Wuhan University, Wuhan, China*)

GIS-based Impact Analysis of High Speed Railways on the Spatial Redistribution of Economic Activities in China
Xijing LI, Bo HUANG (*Department of Geography and Resource Management, The Chinese University of Hong Kong, Hong Kong, HKSAR China*)

Estimating Population by Ancestral Area based on Surnames using the Telephone Directory of Keihanshin Metropolitan Area, Japan
Takashi KIRIMURA (*Faculty of Letters, Kogakkan University, Ise, Japan*)

January 6, 2017 Friday

6 January 2017, Friday 9:00 – 10:30
S2.1 – Smartphone, Crowdsourcing, and GIS (RS202, Runme Shaw Building)

Chair: Prof. Chih-Hong SUN, *National Taiwan University, Taipei, Chinese Taipei*

Regression Analysis to Estimate the Number of Population using the GPS Data Collected from Smartphones
Rana ICHINOSE, Yoshihisa MARUYAMA (*Graduate School of Engineering, Chiba University, Chiba, Japan*); Shigeru NAGATA (*Kajima Technical Research Institute, Tokyo, Japan*)

A Real-time Route Network based Indoor Localization using Smartphones
Yan ZHOU, Xianwei ZHENG, Hanjiang XIONG (*State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, Wuhan, China*)

Quantifying the Effect of Mixed-Use on Neighborhood Vibrancy using Mobile Phone and POI Data
Xiaoping NING (*School of Civil Engineering, Shenzhen University, Shenzhen, China; Didi Chuxing Technology, Beijing, China*); Yang YUE (*School of Civil Engineering, Shenzhen University, Shenzhen, China*); Yan ZHUANG (*State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, Wuhan, China*)

An Urban Environmental Sensing Infrastructure with Crowdsourcing and Spatial Big Data for Early Warning of Critical Conditions
Chih-Hong SUN, Shiang-Hsu LIN (*Department of Geography, National Taiwan University, Taipei, Chinese Taipei*); Tzai-Hung WEN (*Department of Bio-industrial Mechanics Engineering, National Taiwan University, Taipei, Chinese Taipei*); Joe-Air JIANG, Jehn-Yih JUANG (*Department of Geography, National Taiwan University, Taipei, Chinese Taipei*)

6 January 2017, Friday 9:00 – 10:30
S2.2 – GIS for Transportation Applications (RS203, Runme Shaw Building)

Chair: Prof. Jianya GONG, *Wuhan University, Wuhan, China*

Study on the System for Congestion of the Sightseeing Facility
Minami TSURUDA (*The University of Tokyo, Tokyo, Japan*); Yukio SADAHIRO (*Center for Spatial Information Science, The University of Tokyo, Tokyo, Japan*)

Locating Urban Metro Stations by using Spatial Big Data
Zhaoliang LUAN, Wei TU, Jiasong ZHU (*Shenzhen Key Laboratory of Spatial Smart Sensing and Services, Shenzhen University, Shenzhen, China*); Shaoqing SHEN (*Shenzhen Research Center of Digital City Engineering, Shenzhen, China*)

The Robustness Evaluation of Global Cargo-ship Network
Peng PENG, Xiliang LIU, Feng LU (*State Key Laboratory of Resources and Environmental Information System, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, China*)

Underground Transportation and Monitoring of Freight in Intra City Networks
Oindrilla CHATTERJEE, Sourabh KARANDIKAR, Varsha TURKAR (*Vidyalankar Institute of Technology, Mumbai, India*)

6 January 2017, Thursday 9:00 – 10:30
S2.3 – Cartography, Visualization, and GIS (RS204, Runme Shaw Building)

Chair: Prof. Zhilin LI, *The Hong Kong Polytechnic University, Hong Kong, HKSAR China*

The Self-adaptive Indoor 3D Map Visualization using Semantic Reasoning Method
Tingli YU, Wei GUO, Jie MEI (*State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, Wuhan, China*); Yi LIU (*School of Geodesy and Geomatics, Wuhan University, Wuhan, China*)

Eye Tracking Based Usability Evaluation on Schematic Metro Maps with Different Design Principles
Zheng LIU, Zhilin LI (*Department of Land Surveying and Geo-Informatics, The Hong Kong Polytechnic University, Hong Kong, HKSAR China*)

Point Grid Map: A New Type Map for Statistical Data Associated with Geographic Points
Mengjie ZHOU, Jing TIAN, Xiong CHENG (*School of Resource and Environment Sciences, Wuhan University, Wuhan, China*)

Serving Topographic Map Data for Interoperable Use: A Data Perspective
Jung-Hong HONG, Han-Wen LIU, Ching-Sung YANG (*Department of Geomatics, National Cheng Kung University, Tainan, Chinese Taipei*)

6 January 2017, Friday 9:00 – 10:30
S2.4 – GIS Analysis of Accessibility (RS205, Runme Shaw Building)

Chair: Prof. Yaolin LIU, *Wuhan University, Wuhan, China*

GIS-based Mapping and Accessibility Analysis to Public Health Facilities in Sheikhupura, Pakistan
Nasir JAVED, Ehsan SAQIB, Tahir Ali AKBAR, Urooj SAEED (*The Urban Unit, Lahore, Pakistan*)

Service Capability Analysis of Greenway in Wuhan based on GIS
Junwen BAI, Penglin ZHANG, Qing CAO, Shuaijun LIU (*School of Remote Sensing and Information Engineering, Wuhan University, Wuhan, China*)

Exploring Service-oriented Community Facilities for Daily Life in High-density Cities: A Study of Hong Kong
Edwin H.W. CHAN (*Department of Building and Real Estate, Research Institute of Sustainable Urban Development, The Hong Kong Polytechnic University, Hong Kong, HKSAR China*); Tunney C.F. LEE (*Department of Urban Studies and Planning, Massachusetts Institute of Technology, Cambridge MA, United States of America*); Esther H.K. HUNG (*Department of Building and Real Estate, The Hong Kong Polytechnic University, Hong Kong, HKSAR China*); Tingting CHEN (*Institute of Urbanization, Sun Yat-sen University, Guangzhou, China*); Wei LANG (*Department of Building and Real Estate, The Hong Kong Polytechnic University, Hong Kong, HKSAR China*)

Analysis of Workers' Accessibility from GPS Travel Survey using Isochrones: A Case Study of Link Flow Application in Bangkok
Garavig TANAKSARANOND (*Chulalongkorn University, Bangkok, Thailand*)

10:30 – 11:00： TEA AND COFFEE (Run Run Shaw Podium)

6 January 2017, Friday 11:00 – 12:30
S3.1 – GIS and Geo-Simulation (RS202, Runme Shaw Building)

Chair: Prof. Qing ZHU, *Southwest Jiaotong University, Chengdu, China*

Land Use Change and Urban Growth Prediction in Mae sort District, Thailand
Thitawadee SUVACHANANONDA, Yoshihisa MARUYAMA, (*Department of Urban Environment Systems, Graduate School of Engineering, Chiba University, Chiba, Japan*)

Dynamic Simulation on the Spatio-temporal Patterns of Land Use Change
Qing CAO, Penglin ZHANG, Junwen BAI, Qi ZHANG (*School of Remote Sensing and Information Engineering, Wuhan University, Wuhan, China*)

Research on Method of Conflict Detection and Resolution for Collaborative Simulation of Global Change based on GCAM
Yuting CHEN, Hui LIN (*Institute of Space and Earth Information Science, The Chinese University of Hong Kong, Hong Kong, HKSAR China*)

A CA based Ecosystem Service Evaluation for a Highly Urban Watershed, Wuhan, Central China
Wenting ZHANG, Shaobo LIU (*College of Resouces and Environemtn Huazhong Agricultural University, Wuhan, China*)

6 January 2017, Friday 11:00 – 12:30
S3.2 – GIS Analysis of Social Media Data (RS203, Runme Shaw Building)

Chair: Prof. Brian LEES, *The University of New South Wales, Canberra, Australia*

Sensing Traffic from Social Media Texts
Hengcai ZHANG (*State Key Laboratory of Resources and Environmental Information System, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, China; Fujian Collaborative Innovation Centre for Big Data Applications in Governments, Fuzhou, China*); Peiyuan QIU (*State Key Laboratory of Resources and Environmental Information System, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, China*); Feng LU (*State Key Laboratory of Resources and Environmental Information System, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, China; Fujian Collaborative Innovation Centre for Big Data Applications in Governments, Fuzhou, China*)

SMIRF: A High Performance Geo-tagged Social Media Information Accessing and Serving Framework and its Application in Geospatial Research Field
Meng XIAO, Chao YANG (*China University of Geosciences, Wuhan, China*)

Examining Activity-Space Segregation of Urban-Village Residents in Urban China Using Social Media Data: A Case Study of Shenzhen
Zifeng CHEN, Anthony G.O. YEH (*Department of Urban Planning and Design, The University of Hong Kong, Hong Kong, HKSAR China*)

Crowdsourcing Data based Features Fusion for Indoor Scene using Single Image and 3D Model
Wei MA, Xianwei ZHENG, Hanjiang XIONG, Huacheng ZHU (*State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, Wuhan, China*)

6 January 2017, Friday 11:00 – 12:30
S3.3 – Urban Spatial Structures (RS204, Runme Shaw Building)

Chair: Prof. Anthony G.O. YEH, *The University of Hong Kong, Hong Kong, HKSAR China*

Analyzing Structure and Variation of Spatial Interactions in Urban Space
Meng ZHOU (*Department of Geography, Hong Kong Baptist University, Hong Kong, HKSAR China*); Yang YUE, Qingquan LI (*Shenzhen Key Laboratory of Spatial Smart Sensing and Service, Shenzhen University, Shenzhen, China*)

Spatial Variation of Self-containment and Jobs-housing Balance using Big Data
Joseph Xingang ZHOU, Anthony G.O. YEH (*Department of Urban Planning and Design, The University of Hong Kong, Hong Kong, HKSAR China*)

Social Media Check-in Data for Urban Resident and Business Area Expanding Research
Xinglu LI, Wen LEI, Chao YANG (*China University of Geosciences, Wuhan, China*)

Estimating Housing Rent in the Metropolitan Area by using Online Rental Listings and Ensemble Learning
Yimin CHEN, Xia LI, Xiaoping LIU (*Guangdong Key Laboratory for Urbanization and Geo-simulation, School of Geography and Planning, Sun Yat-sen University, Guangzhou, China*)

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6 January 2017, Friday 11:00 – 12:30
S3.4 – Spatiotemporal Analysis and Modeling I (RS205, Runme Shaw Building)

Chair: Prof. Bo HUANG, *The Chinese University of Hong Kong, Hong Kong, HKSAR China*

Spatial Spillover Effect Analysis of Inter-provincial Migration Flows in China from 2005-2010
Yingxia PU, Xiao HAN (*School of Geographic and Oceanographic Sciences, Nanjing University, Nanjing, China*)

Change Research and Analysis of Economic Development in Wuhan City Circle nearly 20 Years based on the DMSP/OLS Night Light Image
Shuaijun LIU, Penglin ZHANG, Zheng LI, Qi ZHANG (*School of Remote Sensing and Information Engineering, Wuhan University, Wuhan, China*)

Geospatial Variation Analysis based on Taiwan Geographical Statistical Classification (TGSC): A MAUP Perspective
Jung-Hong HONG, Jing-Cen YANG (*Department of Geomatics, National Cheng Kung University, Tainan, Chinese Taipei*)

Urban Heat Island Mapping using High-Resolution Satellite Imagery based on Scale-Invariant Modeling and GIS
Yulun ZHOU, Yimeng SONG, Bo HUANG (*Department of Geography and Resource Management, The Chinese University of Hong Kong, Hong Kong, HKSAR China*)

12:30 – 14:00: LUNCH (RS202-205, Runme Shaw Building)

6 January 2017, Friday 14:00 – 15:30
S4.1 – High Performance Computing and Cyber GIS (RS202, Runme Shaw Building)

Chair: Prof. Hui LIN, *The Chinese University of Hong Kong, Hong Kong, HKSAR China*

pRPL + pGTIOL: Combining a Parallel Processing Library and a Parallel I/O Library for Big Raster Data
Qingfeng GUAN (*National Engineering Research Center of GIS and School of Information Engineering, China University of Geosciences, Wuhan, China*)

A Study on Remote Sensing Retrieval of Chlorophyll-a Concentration in Pearl River Estuary Waters based on Particle Swarm Optimization and Neural Network Method
Qifei ZHANG, Zhifeng WU, Xuetong XIE (*School of Geographical Sciences, Guangzhou University, Guangzhou, China*)

A Method of Building and Searching Semantic Pattern Graphs for Searching Complex Geographic Entities
Wei GUO, Bing SHE, Teng JIANG, Xuying WANG, Guangshun CAO (*State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, Wuhan, China*)

Sensing Urban Space: Towards Urban Scene Understanding using Deep Convolutional Neural Network
Fan ZHANG (*Institute of Space and Earth Information Science, The Chinese University of Hong Kong, Hong Kong, HKSAR China*); Hui LIN (*Institute of Space and Earth Information Science, Shenzhen Research Institute, Department of Geography and Resource Management, The Chinese University of Hong Kong, Hong Kong, HKSAR China*); Mingyuan HU (*Institute of Space and Earth Information Science, Shenzhen Research Institute, The Chinese University of Hong Kong, Hong Kong, HKSAR China*)

6 January 2017, Friday 14:00 – 15:30
S4.2 – Advances in Spatial Data Handling (RS203, Runme Shaw Building)

Chair: Prof. P.C. LAI, *The University of Hong Kong, Hong Kong, HKSAR China*

A Fuzzy Trie Based Algorithm for Rapid Extraction of Spatial Vocabularies
Xinyan ZHU (*Collaborative Innovation Center of Geospatial Technology, Wuhan University, Wuhan, China; State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, Wuhan, China*); Bing SHE (*State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, Wuhan, China*); Yi LIU (*School of Geodesy and Geomatics, Wuhan University, Wuhan, China*); Jun PAN (*State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, Wuhan, China*)

Quality-Aware Consideration of GIS Operation Design: A New Approach of Creating Voronoi Diagram
Jung-Hong HONG, Yu-Ting SU (*Department of Geomatics, National Cheng Kung University, Tainan, Chinese Taipei*)

Design and Implementation of Parallel Geographically Weighted k-nearest Neighbor Classifier
Yingxia PU, Xinyi ZHAO (*School of Geographic and Oceanographic Sciences, Nanjing University, Nanjing, China*)

High-quality Multiresolution TIN Meshes from LiDAR-derived Ground Points based on Conformal Geometry
Xianwei ZHENG, Jianya GONG, Hanjiang XIONG (*State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, Wuhan, China*); Kehua SU (*School of Computer Science, Wuhan University, Wuhan, China*); Min TANG, Linwei YUE (*State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, Wuhan, China*)

Holistic Approach for Road Network Management in Urban Areas
Sourabh KARANDIKAR, Oindrilla CHATTERJEE, Varsha TURKAR (*Vidyalankar Institute of Technology, Mumbai, India*); P VENKATACHALAM, Deepak CHOKSI (*Indian Institute of Technology Bombay, Mumbai, India*)

6 January 2017, Friday 14:00 – 15:30
S4.3 – Data Quality and Management (RS204, Runme Shaw Building)

Chair: Prof. Bor-Wen TSAI, *National Taiwan University, Taipei, Chinese Taipei*

The Optimized Model for Adaptive-step based Ocean Streamline Tracking Algorithm
Ting LI, Min JI (*Geomatics College, Shandong University of Science and Technology, Qingdao, China*); Fengxiang JIN (*President Office, Shandong Jianzhu University, Jinan, China*); Zhongyun LIAO, Yong SUN (*Geomatics College, Shandong University of Science and Technology, Qingdao, China*)

Is there Quality in Transaction? The Method of Evaluation and Practice of using Actual Inter-enterprise Transaction Big Data
Yohei YAMAMOTO (*Graduate School of Frontier Sciences, The University of Tokyo, Tokyo, Japan*); Yuki AKIYAMA, Ryosuke SHIBASAKI (*Center for Spatial Information Science, The University of Tokyo, Tokyo, Japan*)

Quality Assessment of VGI Data - The Case of Volunteered Butterfly Data
Bor-Wen TSAI, Yi-Jie WU, Ming-Kuang CHUNG (*Department of Geography, National Taiwan University, Taipei, Chinese Taipei*)

A Copyright Tracing and Protection Method for Remote Sensing Image
Deyu TONG (*Key Laboratory of Virtual Geographic Environment, Nanjing Normal University, Nanjing, China*); Na REN (*State Key Laboratory Cultivation Base of Geographical Environment Evolution, Nanjing, China*); Changqing ZHU (*Jiangsu Center for Collaborative Innovation in Geographical Information Resource Development and Application, Nanjing, China*)

15:30 – 16:00: TEA AND COFFEE (Run Run Shaw Podium)

6 January 2017, Friday 16:00 – 17:30
S5.1 – GIS and Environmental Applications (RS202, Runme Shaw Building)

Chair: Dr. Kenneth TANG, *The University of Hong Kong, Hong Kong, HKSAR China*

Research of Air Pollution Monitoring System based on Wireless Sensor Network and GIS in Mine Area
Yong SUN (*Geomatics College Shandong University of Science and Technology, Qingdao, China*); Fengxiang JIN (*Shandong Jianzhu University, Jinan, China*); Min JI, Ting LI (*Geomatics College, Shandong University of Science and Technology, Qingdao, China*); Huimeng WANG (*Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, China*)

The Retrieval of Soil Iron Oxide Content using Hyperspectral Remote Sensing Data
Ying GUO, Min CHAI, Zhixing GUO, Hui SUN, Yuzhi YUAN (*Guangdong Institute of Eco-Environmental Technology, Guangzhou, China*)

Visual Analysis on Spatial-temporal Pattern of Water Quality Change using a Circle Cartogram, A Case Study of Yangtze River Basin
Lina HUANG, Yanfang LIU (*School of Resource and Environmental Sciences, Wuhan University, Wuhan, China*)

Smart Use of Geographic Information System (GIS) Platform for Delivering Weather Information and Nowcasting Services
Wang Chun WOO, Chi Kin PAN, Siu Wai CHAN (*Hong Kong Observatory, Hong Kong, HKSAR China*)

Application of GIS for Earthquake Hazard Assessment Base on RADIUS Method Case Study of Bangkok
Taanyawit JITPAKDEE, Chakhrit PHITHAKRUTTANASAKUL (*Geo-Informatics and Space Technology Development Agency, Bangkok, Thailand*)

6 January 2017, Friday 16:00 – 17:30
S5.2 – Spatiotemporal Analysis and Modeling II (RS203, Runme Shaw Building)

Chair: Prof. Ryosuke SHIBASAKI, *The University of Tokyo, Tokyo, Japan*

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Ying SONG, Hui ZHANG, Yanfang LIU, Zixi LIU, Qianyi LI, Yang YU, Guoguang XU (*School of Resource and Environmental Sciences, Wuhan University*)

Immediate Estimation of Building Damage and the Number of Evacuees in Building Unit after the Earthquake Disaster using Building Micro Geodata
Taisei SATO (*Graduate School of Frontier Sciences, The University of Tokyo, Tokyo, Japan*); Yuki AKIYAMA, Ryosuke SHIBASAKI (*Center for Spatial Information Science, The University of Tokyo, Tokyo, Japan*)

Exploring Human Group Mobility Patterns from Long-term Geo-tagged Social Media Data: A User Case of CUG Group in Wuhan City
Xuan DING, Chao YANG (*China University of Geosciences, Wuhan, China*)

Spatial-temporal Analysis on Dengue Fever in a Tropical City
Chien-Chou CHEN, Bo-Cheng LIN, Ta-Chien CHAN (*Academia Sinica, Taipei, Chinese Taipei*)

6 January 2017, Friday 16:00 – 17:30
S5.3 – GIS and Sustainable Cities (RS204, Runme Shaw Building)

Chair: Dr. Anond SNIDVONGS, *GISTA, Bangkok, Thailand*

Decoupling Renewable Energy Growth from Commodity Cycle
Sourabh KARANDIKAR, Oindrilla CHATTERJEE, Varsha TURKAR (*Vidyalankar Institute of Technology, Mumbai, India*); P VENKATACHALAM, Deepak CHOKSI (*Indian Institute of Technology Bombay, Mumbai, India*)

Identifying Refueling/Fuel Consumption and Estimating Emission using Spatial-temporal GIS
Zihan KAN, Luliang TANG (*Wuhan University, Wuhan, China*)

The Thermal Environment Effect of Water Landscape in High-density Urban Built-up Area - A Case Study of the Center District in Guangzhou
Qifei ZHANG, Zhifeng WU (*School of Geographical Sciences Guangzhou University, Guangzhou, China*)

A Mixed Green and Grey Infrastructure Strategy of Sponge City using Spatial Analytics: A Case Study of Hong Kong
Yu WANG, Xintao LIU (*Department of Land Surveying and Geo-Informatics The Hong Kong Polytechnic University, Hong Kong, HKSAR China*)

Development of an Applicable GHG Inventory Method for Chinese Cities and Apply It to GIS Analysis
Ruixi ZHAO, Hiroshi ONODA (*Graduate School of Environment and Energy Engineering, Waseda University, Tokyo, Japan*)

Introduction to Keynote Speakers

Professor Michael BATTY

Fellow of Royal Society
Professor, The Bartlett School of Planning, University College London, London, UK

Michael Batty is Bartlett Professor of Planning at University College London where he is Chair of the Centre for Advanced Spatial Analysis (CASA). He has worked on computer models of cities and their visualisation since the 1970s and has published several books, such as **Cities and Complexity** (MIT Press, 2005) which won the Alonso Prize of the Regional Science Association in 2011, and most recently **The New Science of Cities** (MIT Press, 2013). His blogs www.complexcity.info cover the science underpinning the technology of cities and his posts and lectures on big data and smart cities are at www.spatialcomplexity.info . His research group is working on simulating long term structural change and dynamics in cities as well as their visualisation. Prior to his current position, he was Professor of City Planning and Dean at the University of Wales at Cardiff and then Director of the National Center for Geographic Information and Analysis at the State University of New York at Buffalo. He is a Fellow of the British Academy (FBA) and the Royal Society (FRS), was awarded the CBE in the Queen's Birthday Honours in 2004 and the 2013 recipient of the Lauréat Prix International de Géographie Vautrin Lud. In 2015 he received the Gold Medal of the Royal Geographical Society for his work on the science of cities. In 2016, he received the Senior Scholar Award of the Complex Systems Society and the Gold Medal of the Royal Town Planning Institute. He has Honorary Doctorates from the State University of New York and from Leicester University.

Abstract

The most recent wave of computation in contemporary societies involves the application of new digital technologies to the public domain where the idea of automating the city and its functions has now become central to urban planning. The so-called smart city which is the label used for these collective technologies is based on the embedding of a multitude of passive and active sensors into the built environment which is producing vast quantities of data in space and time through real time streaming. This data is 'big' in the volumetric sense and it is also complete in that is rarely related to any sampling of these data volumes. Moreover, it is changing our conception of the city from thinking about urban changes in the medium or long term to the short term and the routine – to the hourly and daily cycle of activities – which in turn is changing the very things that we seek to plan and optimize (Batty, 2016). To an extent this also represents a change in scale for where time scale are very short, spatial scales are also shorter and this the focus is on much more local spatial environments. In this presentation, I will begin with a conceptual model of the smart city, talk about real time streaming and the kinds of sensors that are now being employed to generate new data. I will review the problems and potential of this data and the kinds of model that are need to look at movement and change in the 24-hour city. I will present some examples from our work on transit systems where there is much transit data dealing with real time streaming showing examples in Singapore, London and Beijing, and work on social media for large cities and how we develop portals or dashboards to such examples while also exploring new forms of participation, crowdsourcing and open data that are enriching the data that we have at our disposal. I will conclude with ideas abut how the real time city can contribute to our understanding of longer time periods and urban change.

Reference: Batty, M. (2016) Big Data and the City, **Built Environment**, **42**, 3, 321-337.

Introduction to Keynote Speakers

Professor Deren LI

Academician, Chinese Academy of Sciences
Academician, Chinese Academy of Engineering
Wuhan University, Wuhan, China

Prof LI Deren is a scientist in photogrammetry and remote sensing, with dual membership of both the Chinese Academy of Sciences and the Chinese Academy of Engineering, member of the Euro-Asia International Academy of Science and honorary doctorate of ETH. He is the Professor and PhD supervisor of Wuhan University, Chair of the Academic Committee of Wuhan University and the State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing. He was President of the Chinese Society of Geodesy, Photogrammetry and Cartography and President of Hubei Association for Science and Technology (HAST),

In the 1980s, Prof Li was mainly engaged in the studies of observation errors and processing methods in geodesy and photogrammetry. In 1985, he completed theoretical research in the separability of model errors, which advanced the reliability theory to the separability phase. The result of this study received the 1988 Best Paper Award of the German Society of Photogrammetry and Remote Sensing, and Hansa Luftbild Award. Since 1990, Prof Li has concentrated on the research and education in geo-spatial information science and technology represented by remote sensing (RS), global positioning system (GPS) and geographic information systems (GIS). Since 1994, Prof. Li has worked together with his young brother Deyi Li on the theory and application of spatial data mining.

Prof Li served as President of International Society for Photogrammetry and Remote Sensing (ISPRS) Technical Commissions III and VI from 1988-1992 and 1992-1996 respectively. He worked for Committee on Earth Observation Satellites in 2002-2004 and was the first President of Asia GIS Association in 2003-2006. He received the Samuel G. Gamble Award at the ISPRS XXI Congress in 2008 and was elected as an ISPRS Honorary Member at the IPRRS XXII Congress in 2012. He received an award in appreciation and recognition of the outstanding contribution to the success and achievements of the MOST/ESA Dragon Program 2004 - 2007. He has received 5 time National Science and Technology Awards in China and also trained 155 doctor students and more than 100 master students in recent 30 years.

Abstract

With the rapid construction of smart earth and smart city, the era of big data is coming. In this talk the author will try to answer the related questions of big data in geo-informatics: how big the geospatial data, how to treat these big data and how to discover the pattern, rule and knowledge from big geospatial data. Four spatial data mining examples are used to illustrate the value of big data in geo-informatics. The first example is Image data mining which includes huge block adjustment without GCP and automatic generation of DOQ/DSM from mapping satellite data; automatic Image Retrieval on Large-Scale Tiled RS Image Database; Multi-temporal SAR data mining for deformation monitoring and Night light RS data mining for different socio-economic application. The second example is GIS data mining, which includes Inductive learning of banks operating income analysis and site evaluation, Sensor network applied in Disaster Management Web-GIS and Intelligent Management Web GIS for ecological environment of Yangtze river basin based on Geospatial Sensor Web. The third example is Social media Web Data Mining. The forth example is Smartphone Data Mining for Human behavior cognition. Finally, a new definition of Geomatics in big data era is given by the author, that is: Geomatics in big data era is a multiple discipline science and technology which，using a systematic approach，integrates all the means for spatio-temporal data acquisition, information extraction, networked management, knowledge discovering, spatial sensing and cognition, as well as intelligent location based services of any physical objects and human activities around the earth and its environment.

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Technical Tour

A technical tour to the Energizing Kowloon East Office, Kai Tak Development Area and Kai Tak Cruise Terminal will be organised on 7 January 2017.

Visit to Energizing Kowloon East Office (EKEO), Development Bureau
122 Hoi Bun Road, Kwun Tong, Kowloon
www.ekeo.gov.hk

Technical Tour in Hong Kong (7 January 2017 Saturday)	
9:00	Pick-up and leave from respective hotels
10:00	Briefing and guided tour in EKEO
11:15	Guided tour in Kai Tak Development Area and Kai Tak Cruise Terminal
12:30	Lunch at Kai Tak Cruise Terminal
14:30	Arrive at hotels

Information about EKEO

In the 2011-2012 Policy Address, the Chief Executive (CE) announced the transformation of Kowloon East which comprised the new Kai Tak Development Area, Kwun Tong Business Area and Kowloon Bay Business Area into an attractive, alternative CBD to support the economic development of Hong Kong. Under this policy, land use review would be conducted and connectivity and urban design of the area would be improved. Two years ago, in the 2014-2015 Policy Address, the CE further suggested that Kowloon East would be a pilot area to explore the feasibility of developing a smart city.

According to the current plan, Information and Communications Technology (ICT) will be adopted to enable the linkage among multiple objects and devices with the use of data and network infrastructure, and supports the development and implementation of smart city initiatives. These technologies include, but not limited to WiFi infrastructure, Internet of Things (IoT), Centralised Digital Infrastructure and Open Data.

A study has been commenced to investigate the feasibility in terms of its strategies, challenges, constraints and opportunities. Details of the study could be found at www.smartke.hk/eng/study.php.

Information about the Energising Kowloon East Office (EKEO)

To capitalize upon the opportunity to kick start transformation of Kowloon East in light of the general support of the community, a preparatory team was set up in the Development Bureau on 13 February 2012 to prepare for the establishment of EKEO for taking forward the initiatives and to embark on the immediate tasks pertaining to the transformation of Kowloon East. The multi-disciplinary EKEO was inaugurated on 7 June 2012 to steer, supervise, oversee and monitor the development of Kowloon East with a view to facilitating its transformation into another premier CBD of Hong Kong to support our economic growth and strengthen our global competitiveness.

EKEO will seek ways to transform the area into a sustainable CBD by making use of smart data and technology, creating a low carbon green community and enhancing walkability and mobility, such as providing high-quality municipal management and public services; disseminating information to the public and collecting views in digital format, implementing the Environmentally Friendly Linkage System and infrastructure; promoting green building and greening; using technology to enhance pedestrian and vehicular accessibility with a view to making the area a better place for work and play.

For more detailed information about EKEO, please refer to the link www.ekeo.gov.hk

Visit Arrangement

A briefing will be given by EKEO staff on the progress of the infrastructure enhancement and the place making projects, the progress of the current feasibility study and initial thinking about the technologies to be adopted in Kowloon East, followed by a guided tour along the promenade.

Information about Kai Tak Development Area

The airport at Kai Tak was relocated to Chek Lap Kok in July 1998. The relocation has offered a good opportunity for major development in the Metro Area.

Kai Tak Development is a huge and highly complex development project spanning over 320 hectares with the largest available land fronting Victoria Harbour. It offers opportunities to bring the harbour to the people, provide quality living environment for around 90 000 residents, as well as revitalise all of the surrounding districts such as Kowloon City, Wong Tai Sin and Kwun Tong. What's more, KTD seeks to practise sustainable development and cultivate a comprehensive network of parks and gardens for everyone to enjoy.

The planning vision of KTD is to develop "a distinguished, vibrant, attractive and people-oriented community by the Victoria Harbour". More detailed information about KTD could be found at
http://www.ktd.gov.hk/eng/overview.html
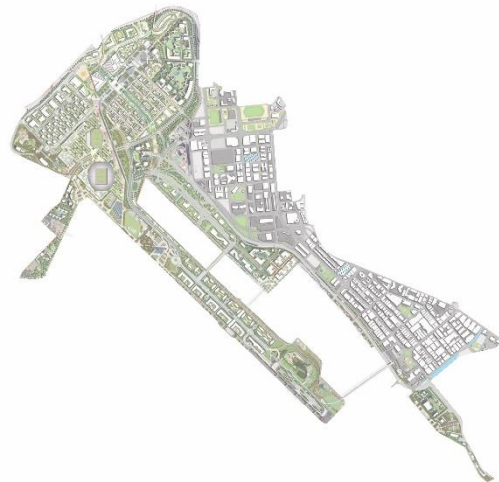
Information about Kai Tak Cruise Terminal

Built on the runway of the former Kai Tak Airport, the Kai Tak Cruise Terminal is an iconic structure centrally located in Hong Kong's Victoria Harbor. The terminal has year-round operations and an array of amenities not seen elsewhere in the industry. The Cruise Terminal has a wide range of facilities, including shopping mall, rooftop park and restaurants.

The terminal has capacity to berth two large 360-metre-long vessels, each with more than 4,000 passengers and over 2,000 crew, as well as anticipating the demands of a next generation of larger ships. The terminal starts operating in the June of 2013. In 2015, the terminal hosted ship calls year-round, and processed more itinerary cruise passengers (228,809 passengers) than all Hong Kong berthing facilities combined in 2013. For more detailed information about the terminal, please refer to http://www.kaitakcruiseterminal.com.hk/

Visit Arrangement

A guided tour of the new cruise terminal and a briefing on the planning of the Kai Tak Development Areas will be conducted at the terminal, followed by lunch at a Chinese restaurant.

Helpful Information

Conference Registration

The Asia GIS Conference 2017 Registration Desk is located in the **Rayson Huang Theatre Foyer**. Please be sure to pick up the "Last Minute Programme Changes", if available, which will update you on the latest changes of the programme.

The Registration Desk will be staffed during the following hours:

Wednesday, 4 January	14:30 – 17:30
Thursday, 5 January	8:30 – 9:00
Friday, 6 January	8:30 – 9:00

Presentation Tips

- Each parallel session contains 3-5 papers. Each presenter has 15 minutes to present the paper depending on the number of papers, followed by Q&A. Chair of the session will inform presenters of the maximum presentation time before the session.
- In 15 minutes you can typically present about five double-spaced pages at a pace that listeners can comfortably follow.
- Do not attempt to read your paper. Do not turn your back to the audience to read a projected text and do not read out what your audiences can read for themselves.
- Indicate at the beginning of your talk if you will distribute your paper in hard copy at the end of the session or if you are willing to send electronic versions when you return home.
- Concentrate on what is new, interesting and different rather than providing full theory and methodology.
- Asia GIS Conference 2017 does not publish a conference proceeding book and, therefore, Asia GIS Conference 2017 does not have style, spelling and usage guidelines.
- If you have any concerns about setting up your presentation, please go to the session room 20 minutes before the start of your session to set up your presentation and ask conference staff to assist you before your scheduled presentation.
- If you do experience trouble at the very last minute of your presentation (it happens!) – please step aside immediately and offer the time to another presenter while you work out your trouble – and do not hesitate to ask us for help. We will do what it takes to get you up and going.

Audio Visual Equipment
Available On-Site for Presenters
Pre-Set Equipment

Each session room is equipped with a computer and computer projector. NO overhead or slide projectors are provided. Session rooms are staffed by student volunteers. We recommend you to go to the session room 20 minutes before the start of your session to set up your presentation. Please ask the conference staff to assist your set up if necessary.

Computer Protocol

Computers are provided in the session rooms. You do not need to bring your own laptop for presentation. You might just bring the memory stick which contains your presentation file. To be safe, you may back up your file online just in case. The operating system is Microsoft Windows 10 and Microsoft Office 2013 is installed. Make sure your presentation file is compatible with the system and software.

Internet Access

Internet access is provided through Wi-Fi connection. Please refer to **Free Wifi Service on HKU Campus (Wi-Fi.HK via HKU)** (p.23) for details**.**

Session Chair Guidelines

- Please arrive at the session room five minutes prior to the scheduled starting time and introduce yourself to the presenters.
- Inform the presenters of the maximum time that they can use for their paper presentation. This time can vary depending on the number of papers in the session and whether there is a discussant requiring time to respond. A helper in the room will help you to monitor the time of the presentations by showing last 5 minutes (green), 2 minutes (yellow) and STOP (red) signs to the paper presenters.
- When introducing the session - please be brief - tell the audience how many papers will be presented, how long each presentation will be and whether there will be time for questions.
- For each paper, introduce the author and the title of the paper.
- In managing the Q&A-time, please ask questioners to identify themselves and to keep their comments as short as possible to allow the presenters to respond in full.
- Please ensure the session finishes on time. Sessions that overrun will affect next sessions.

Free Wifi Service on HKU Campus (Wi-Fi.HK via HKU)

Connecting to Free Wifi by Mobile Devices (Wi-fi.hk via HKU)

Using IOS as an example: (1) Turn on your iPhone/iPad/iPod Touch and navigate to the home screen. Tap the Settings icon; (2) Tap the Wi-Fi button; (3) While you are on HKU campus, make sure that WiFi is turned ON and tap **"Wi-Fi.HK via HKU"**; (4) You will be prompted to the Wi-Fi.HK via HKU Welcoming page when you open a web browser. Please read the Conditions of Use and Disclaimers ("the Conditions") carefully before using the Wi-Fi.HK via HKU service. If you agree to all the Conditions, tap the Accept and Continue button to start using the WiFi Service.
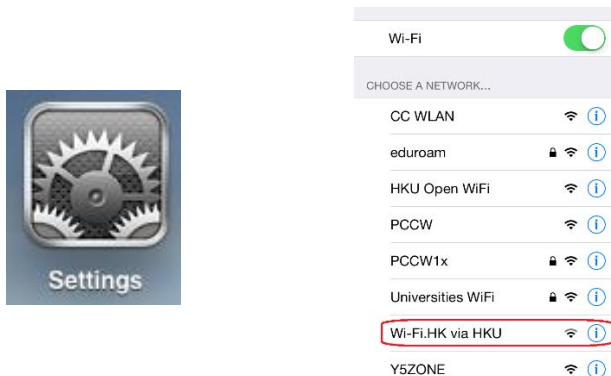
iOS Devices setting icon

Choosing
Wi-Fi.HK via HKU

Wi-Fi.HK via HKU Welcoming Page

Connecting to Free Wifi by Computers (Wi-fi.hk via HKU)

To access Wi-Fi.HK via HKU in Windows 7: (1) Find the wireless network connection icon at the bottom right-hand corner of the screen; (2) Choose the SSID **"Wi-Fi.HK via HKU"** and click Connect; (3) When connecting for the first time you will be asked to select a location. We recommend you choose the option "Public network"; (4) You will be prompted to the Wi-Fi.HK via HKU Welcoming page when you open a web browser. Please read the Conditions of Use and Disclaimers ("the Conditions") carefully before using the Wi-Fi.HK via HKU Service. If you agree to all the Conditions, click the Accept and Continue button to start using the WiFi Service.

Wireless network
connection icon

Available wireless networks

Wi-Fi.HK via HKU Welcoming Page

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Useful Information

Conference

♦ Centre of Urban Studies and Urban Planning
  Rm. 836, Knowles Building, The University of Hong Kong

2859-2721
(Office Hrs.)

♦ Conference Mobile No.

9248-3371
6198-2710

Emergency

♦ Emergency Service (Police, Fire, Ambulance)

999

Info Lines

♦ Telephone Directory Enquiries — 1081
♦ Hong Kong Tourism Board Visitor Hotline — 2508-1234
♦ Weather Information — 187-8200
♦ Overseas IDD and Cardphone Enquiries — 10013
♦ Department of Health — 2961-8989
♦ Consumer Council — 2929-2222
♦ Hong Kong International Airport — 2181-0000
♦ Transport Complaints Unit — 2889-9999

Tourist Information

♦ Hong Kong Tourism Board website
  www.discoverhongkong.com
♦ Conference website
  www.dupad.hku.hk/agisc/
♦ A Symphony of Lights, laser show along the waterfront of the harbour in Central and Tsim Sha Tsui every night at 8 pm
  www.tourism.gov.hk/symphony

Zika Virus Infection

The Alert Response Level under the Government's Preparedness and Response Plan for the Zika Virus Infection is activated.

For personal protection, the followings are essential:
♦ Prevent mosquito proliferation
♦ Take additional preventive measures when engaging in outdoor activities
♦ Pregnant women and women preparing for pregnancy should not travel to areas with ongoing Zika virus transmission

Check out the website of Centre for Health Protection (www.chp.gov.hk/) for guidelines and updates. You can also call the Enquiry Hotline (2125-1111) which is operating 24 hours for more details.

Hospital

In case you do not feel well, it is for your and other people's good that you go to hospital immediately. The closest hospital is **Queen Mary Hospital:**

Queen Mary Hospital
102 Pokfulam Road
Hong Kong
Tel: 2855-3838

The University of Hong Kong

Queen Mary Hospital

Location Map of The University of Hong Kong

Arrival at Conference Venue and Field Trip Shuttle Bus Arrangement

Shuttle buses are arranged for participants to travel from Hotel Jen, Courtyard Marriott, Island Pacific Hotel and Best Western Plus Hotel to the Conference venue.

Shuttle Bus (AGISC 2017 Conference 5 & 6 Jan 2017)

Conference Bus Route 1 (5&6 Jan 2017): Shuttle Bus from Island Pacific Hotel and Courtyard Marriott

Time	Bus Schedule
0750	Attendees at Island Pacific Hotel to wait at hotel lobby
0800	Shuttle bus travels from Island Pacific Hotel to Courtyard Marriott
Before 08:05	Attendees at Courtyard Marriott to wait at hotel lobby
0815	Shuttle bus travels from Courtyard Marriott to the University of Hong Kong
Around 08:25	Arrival at the University of Hong Kong

Conference Bus Route 2 (5&6 Jan 2017): Shuttle Bus from Best Western Plus Hotel and Hotel Jen

Time	Bus Schedule
0750	Attendees at Best Western Plus Hotel to wait at hotel lobby
0800	Shuttle bus travels from Best Western Plus Hotel to Hotel Jen
Before 08:05	Attendees at Hotel Jen to wait at hotel lobby
0815	Shuttle bus travels from Hotel Jen to the University of Hong Kong
Around 08:25	Arrival at the University of Hong Kong

Shuttle Bus (Field Trip 7 Jan 2017)

Field Route 1 (7 Jan 2017): Shuttle Bus from Island Pacific Hotel and Courtyard Marriott

Time	Bus Schedule
0900	Attendees at Island Pacific Hotel to wait at hotel lobby
0910	Shuttle bus travels from Island Pacific Hotel to Courtyard Marriott
Before 0915	Attendees at Courtyard Marriott to wait at hotel lobby
0925	Shuttle bus travels from Courtyard Marriott to the EKEO
1400	Departure from Kai Tak Cruise Terminal to Island Pacific Hotel and Courtyard Marriott
Around 1430	Arrival at Island Pacific Hotel and Courtyard Marriott

Field Route 2 (7 Jan 2017): Shuttle Bus from Best Western Plus Hotel and Hotel Jen

Time	Bus Schedule
0900	Attendees at Island Best Western Plus Hotel to wait at hotel lobby
0910	Shuttle bus travels from Best Western Plus Hotel to Hotel Jen
Before 0915	Attendees at Hotel Jen to wait at hotel lobby
0925	Shuttle bus travels from Hotel Jen to the EKEO
1400	Departure from Kai Tak Cruise Terminal to Best Western Plus Hotel and Hotel Jen
Around 1430	Arrival at Best Western Plus Hotel and Hotel Jen

Walking from West Gate and East Gate to the Conference Venue

From East Gate:

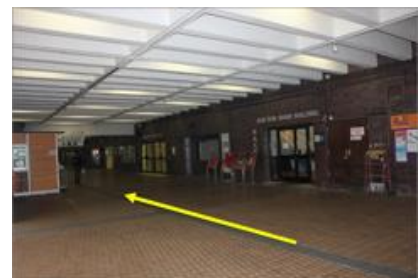1. From East Gate to the Lift Lobby

2. Take lift to G/F

3. Turn right

4. Walk to Sun Yat-sen Plaza

5. Walk along Sun Yat-sen Stair to Run Run Shaw Podium

6. Turn left to Rayson Huang Theatre

From West Gate:

1. From West Gate to lift lobby

2. Take lift to 5/F

3. Turn Left

4. Walk along University Street and turn left

5. Walk along Run Run Shaw Podium

6. Arrive at the Rayson Huang Theatre

Access through HKU MTR Station to Conference Venue

1. Walk towards Exit A1 & A2

2. All lifts can access HKU (Floor: FB)

3. Turn left to University Street from MTR Exit A2

4. Walk along University Street

5. Turn right to Run Run Shaw Podium

6. Walk along Run Run Shaw Podium
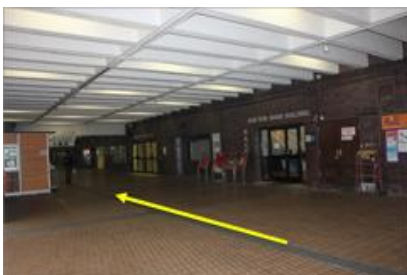
7. Walk along Run Run Shaw Podium

8. Arrive at the Rayson Huang Theatre

Floor Plan of Run Run Shaw Podium

Chong Yuet Ming
Amenities Centre

Exhibition Booth

| Subway | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

esri China HONG KONG

Global VDC

AECOM

THE HONG KONG POLYTECHNIC UNIVERSITY 香港理工大學

DEPARTMENT OF LAND SURVEYING AND GEO-INFORMATICS 土地測量及地理資訊學系

Rayson Huang Theatre

Male Washroom

Female Washroom

Runme Shaw Building
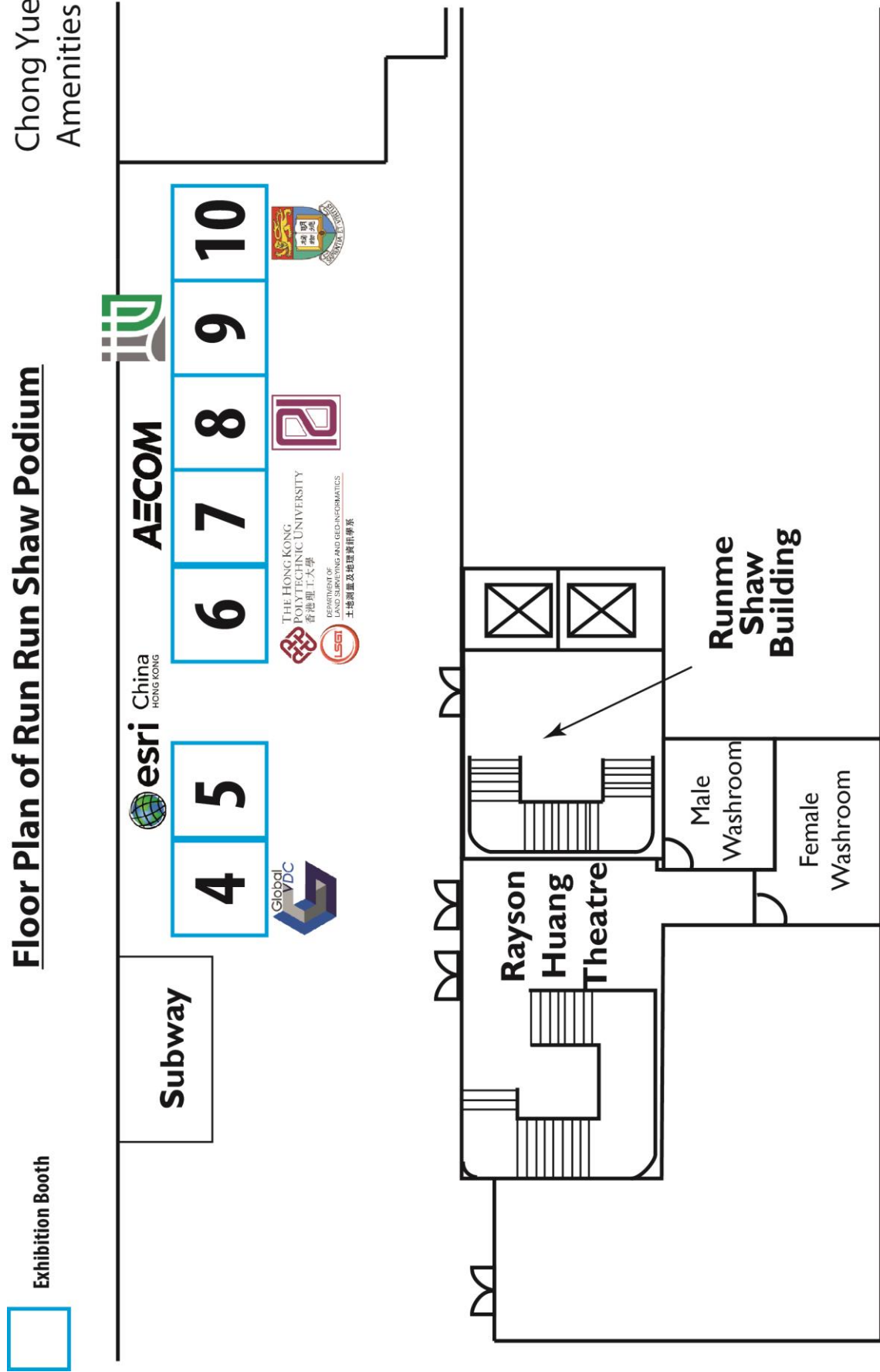
Floor Plan of Rayson Huang Theatre and Runme Shaw Building 1/F

Exhibition Booth | Exhibition Counter

SuperMap
超 图 软 件

Springer

Microsoft

GeoStar
武大吉奥图色技术有限公司
Wuda Geoinformatics Co.,Ltd.

Registration

Male Washroom

Female Washroom

Exit to
Runme Shaw Building
Rm 202, 203, 204, 205 & 206

Rayson Huang Theatre

Opening Ceremony
Keynote Speech
Technology Sharing Sessions

Stage

1 2 3
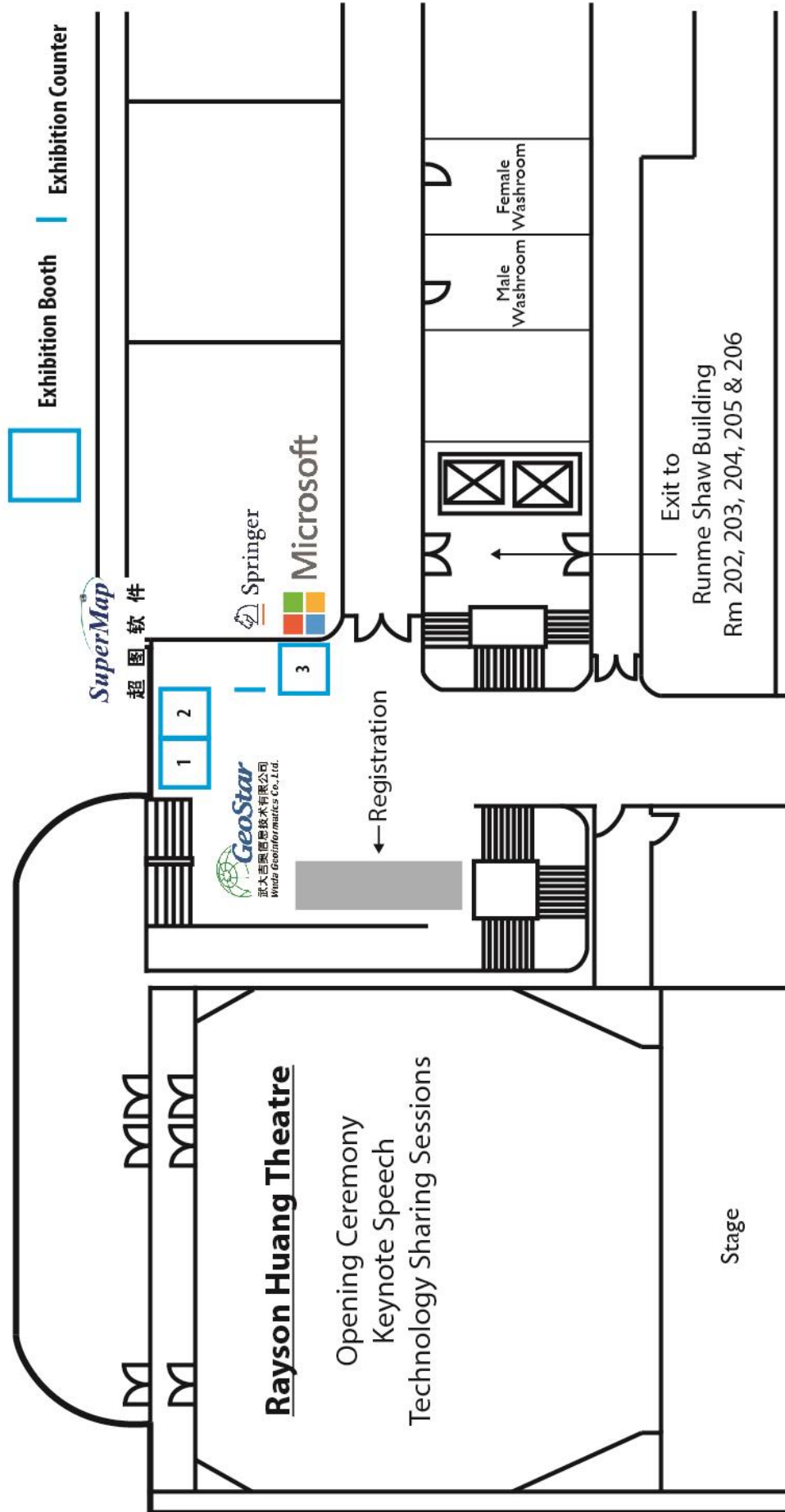
Floor Plan of Runme Shaw Building 2/F

Room 202
Parallel Session:
S1.1, S2.1, S3.1
S4.1, S5.1

Room 203
Parallel Session:
S1.2 ,S2.2, S3.2
S4.2, S5.2

Room 204
Parallel Session:
S1.3 ,S2.3, S3.3
S4.3, S5.3

Room 205
Parallel Session:
S1.4 ,S2.4, S3.4

Room 206

Exit to
Rayson Huang Theatre

Male
Washroom

Female
Washroom
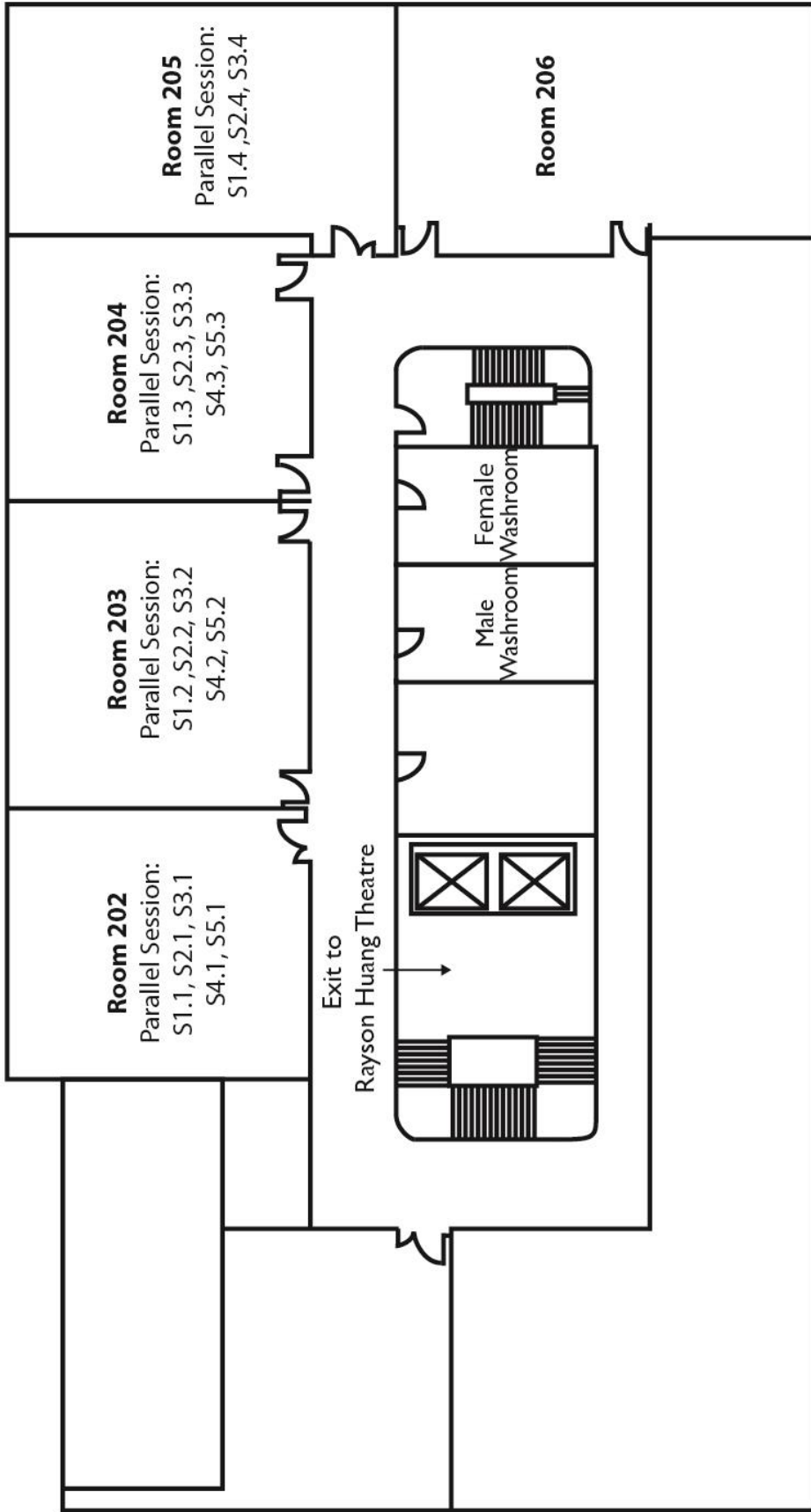
Campus Map of the University of Hong Kong

asiaGIS
ASIA GIS CONFERENCE 2017
HONG KONG 2017 · 5-7 January 2017 | Hong Kong Geographic Information System Association

香港大學

THE UNIVERSITY OF HONG KONG

······ From East Gate to Rayson Huang Theatre
······ From MTR Exit A2 to Rayson Huang Theatre
······ From Rayson Huang Theatre to Lecture Hall II (Dinner)

Conference Dinner
Lecture Hall II

Centre of Urban Studies and Urban Planning

THE UNIVERSITY STREET

Asia GIS Conference 2017
Rayson Huang Theatre

Parallel Session
(Runme Shaw Building)

MTR HKU Station Exit A2

P Buildings with parking spaces
♿ Buildings with 1 or 2 parking spaces for persons with a disability
—— Roadside Parking

Enquiry Hotlines:
Security Control Centre   3917 2882 (24hrs)
Wilson Parking   2546 9984

EO/01/2015

THE H COLLECTION

CITY LIVING WITH LANDMARK STYLE

HEART   HALLMARK   HANDCRAFTED   HARMONY   HOSPITALITY

Henderson Land's pioneering vision and unique architectural approach have led to THE H COLLECTION.

HEART represents our enduring commitment to meeting your needs by exceeding your expectations;

HALLMARK symbolizes our dedication to upholding building excellence and beauty that has led to the creation of inspirational landmarks;

HANDCRAFTED refers to our mix of fine workmanship and state-of-the-art technology that enhances the quality of our buildings;

HARMONY is the spirit of cohesion between built environments and nature that fosters an ideal living space;

while HOSPITALITY reflects our distinguished property management teams who brighten every home and day.

These are the five elements of our contemporary architectural philosophy that elevates elegance and style to a whole new level.

Now you can experience the ultimate in inspirational living, by taking comfort in a better home and a brighter tomorrow.

HOME. WHERE LOVE RESIDES. | HENDERSON LAND

I LOVE
HARMONY }{

THE H COLLECTION
CITY LIVING WITH LANDMARK STYLE

HEART   HALLMARK   HANDCRAFTED   HARMONY   HOSPITALITY

Henderson Land's unique architectural approach has led to THE H COLLECTION,
which elevates elegance and style to a whole new level.

Harmony - A green life. A green future. By upholding green technologies we guarantee long-term environmental sustainbility.
Our green architecture and construction methods also enhance quality of life, while at the same time,
preserving the unique character of local districts and establishing communities of care and belonging that foster an ideal living space.

The H COLLECTION is a set of residential landmarks that provides the ultimate in inspirational living.
Now you can take comfort in a better home and a brighter tomorrow.

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THE H COLLECTION
CITY LIVING WITH LANDMARK STYLE

HOME. WHERE LOVE RESIDES. | 恒基 HENDERSON LAND