ICUI 2017

The 1st International Conference on Urban Informatics

13 -15 November 2017

The Hong Kong Polytechnic University, Hong Kong

Conference Guidebook

Organized by:

PolyU

THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學

LSGI

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

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Programme At-a-Glance

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16:15 - 16:30	Best Paper Award Presentation & Closing	

Biographies of Keynote Speakers

Prof. Michael F. GOODCHILD, University of California, Santa Barbara

Prof. Michael F. Goodchild is awarded University Consortium of Geographical Information Science (UCGIS) Fellow status in recognition of his leadership, contributions to UCGIS, and his remarkable impact on the field of GIScience. Goodchild is the Jack and Laura Dangermond Chair of Geography and Professor of Geography at the University of California, Santa Barbara (UCSB). He is a graduate of the University of Cambridge in physics (1965) and earned a Ph. D. in geography at McMaster University in 1969. He is recognized as the leading academic GIS practitioner in the world. He was elected member of the United States National Academy of Sciences and Foreign Member of the Royal Society of Canada and of the Royal Society of the British Academy. He has been awarded four honorary doctorates and France's Prix Vautrin Lud. He serves on the editorial boards of ten journals and has had published 15 books and 400 articles. He was editor of the journal Geographical Analysis and of the Methods, Models, and Geographic Information Sciences section of the Annals of the Association of American Geographers. He was Chair of the National Research Council's Mapping Science Committee. Currently he is Director of UCSB's Center for Spatial Studies which he helped establish.

Prof. Michael BATTY, University College London

Prof. 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), the Academy of Social Sciences (FAcSS) 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 (generally known as the 'Nobel de Géographie'). This year 2015 he received the Founders Medal of the Royal Geographical Society for his work on the science of cities.

Prof. Anthony G.O. YEH, The University of Hong Kong

Professor Anthony G.O. Yeh joined the Centre in 1981 after working as a Research Officer of the Strategic Planning Unit of the Hong Kong Government. He is now the Chair Professor of Department of Urban Planning and Design, Director of the Geographic Information Systems (GIS) Research Centre and the Deputy Convenor of Contemporary China Studies Strategic Research Area of the University. He has been the Dean of the Graduate School, Director of Centre of Urban Studies and Urban Planning, Director of Institute of Transport Studies and Head of Department of Urban Planning and Design, My main areas of specialization are urban planning and development in Hong Kong, China, and SE Asia, and the applications of geographic information systems in urban and regional planning. He was elected as an Academician of the Chinese Academy of Sciences in 2003, Fellow of TWAS (The Academy of Sciences for the Developing World) in 2010, and Academician of the Academy of Social Sciences in UK in 2013. He was the recipient of the 2008 UN-HABITAT Lecture Award in recognition of outstanding and sustained contribution to research, thinking and practice in human settlements development and planning and 2012 Dr. Gill-Chin Lim Global Award presented in the 53rd Annual Conference of Association of Collegiate Schools of Planning (ACSP) held in Cincinnati, USA, in November 2012, in recognition of global commitment and leadership as a scholar and an educator in the field of humanistic globalization. He is at present President of Asia Geographic Information System Association. He was Secretary-General of the Asian Planning Schools Association (APSA) and Asia Geographic Information System Association. He has been Chairman of the Hong Kong Geographical Association, Vice-President of the Hong Kong Institute of Planners (HKIP), Vice-president of the Commonwealth Association of Planners (CAP), Programme Director of the Geographic/Land Information Technology Programme of the Commonwealth Association of Planners (CAP), Founding President of the Hong Kong Geographic Information System Association (HKGISA), and Chairman of the Geographic Information Science Commission of the International Geographic Union (IGU). He is also honorary professor at various major universities and research institutes in China, including Institute of Geography, Beijing; Tongji University, Shanghai; Zhongshan University, Guangzhou, and Wuhan University, Wuhan. Apart from working in Hong Kong and China, He has done fieldwork in Thailand, Malaysia, Japan, Taiwan, and the Philippines. He has been invited to attend many expert group meetings of the United Nations Centre of Regional Development (UNCRD) and United Nations Educational, Scientific and Cultural Organization (UNESCO). He has conducted many CPD training courses on urban planning and management and geographic information systems in Hong Kong and China. He has served on various planning related bodies of the Hong Kong Government. At present He is a member of the editorial board of Computers, Environment and Urban System, Transactions in GIS, Progress in Planning, International Planning Studies and other international journals. He has been a member of the Planners Registration Board, Transport Advisory Committee, Town Planning Appeal Board, Member of the Pan-PRD Panel of the Central Policy Unit and Chairman of the Transport Complaint Unit of the Hong Kong SAR Government. At present, He is a member of the Appeal Tribunal (Buildings Ordinance). He has been invited to participate in many expert group meetings on master plans of Chinese cities, such as Guangzhou, Zhuhai, Shenzhen, and Hangzhou.

Prof. Jianya GONG, Wuhan University

Prof. Jianya GONG is Academician of Chinese Academy of Science, Dean of school of Remote Sensing Information Engineering, Wuhan University, China. He studied as a PhD candidate at Wuhan Technical University of Surveying and Mapping， and Technical University of Denmark during the time period of 1988 – 1992 and got his Ph.D in 1992 Up to now Prof. Gong has experienced several professional careers in different countries. He worked as a lecturer at Department of Surveying and Mapping, East China Geology College from 1982 to 1988, and an Associate Professor at Department of Photogrammetry and Remote Sensing, Wuhan Technical University of Surveying and Mapping, from 1992 to 1995, and worked as a visiting professor at Department of Geography, University of Massachusetts, Boston, USA over the time period Oct.,1995 - Feb.,1996. He has been a Changjiang Chair professor at the State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan Technical University of Surveying and Mapping and Wuhan University since 1996, and during that time period, he was invited as a visiting professor to work at Department of Surveying and Land Information, Hong Kong Polytechnic University from Mar.,1998 to Sep.,1998, a visiting professor to work at Department of Geography and GeoInformation Science in George Mason University from Nov. 2008 to Feb. 2009. Prof. Gong has been active in organizing international academic exchange. He was a secretary of ISPRS Commission III over the time period Sept., 1990 – July, 1992, a secretary of ISPRS Commission VI over the time period July, 1992 – July, 1996, a chair of Working Group of ISPRS WG IV/2(Federal Database and Interoperability) over the time period July, 2000 – July, 2004, a chair of Working Group of ISPRS WG VII/5(Multi Temporal Data Processing and Change Detection) and a co-chair of Academy Commission of ISPRS XXI Congress over the time period July, 2004 – July, 2008, a member of Working Group (Geographical Information Service) of ISO/TC211 over the time period May, 2003 - Nov., 20012, a chair of Working Group of ISPRS WG IV/4(Virtual Globes and Context-Aware Visualization) over the time period July, 2008- July, 20012. He was the president of the commission VI of ISPRS from July, 2012 to July, 2016. He is the president of CPGIS from Aug. 2017 to July. 2018. His research interests include geospatial data structure and data model, geospatial data integration and management, geographical information system software, geospatial data sharing and interoperability, Photogrammetry, GIS and remote sensing application. He has undertaken 40 research projects and published 12 books and more than 500 scientific papers. He got the Dolezal Award of ISPRS, and 6 national awards and more than 10 other awards in China. The citations of his papers are more than 10,000.

Prof. May YUAN, The University of Texas at Dallas

Prof. May Yuan received all her degrees in Geography: B.S. 1987 from National Taiwan University and M.S. 1992 and Ph.D. 1994 from State University of New York at Buffalo. She is Ashbel Smith Professor of Geospatial Information Sciences and GIS Ph.D. director in the School of Economic, Political, and Policy Sciences at the University of Texas at Dallas. Before she joined UT-Dallas in August 2014, she was Brandt Professor and Edith Kinney Gaylord Presidential Professor and Director of Center for Spatial Analysis at the University of Oklahoma (1994-2014). Currently, she is the Editor in Chief of the International Journal of Geographical Information Science and Vice President of US Cartography and Geographic Information Society. In addition, she serves on US NOAA Environmental Information Services Working Group and US National Geospatial Advisory Committee. Her research interest expands upon space-time representation and analytics to understanding geographic dynamics. Over the years, she has been working to develop new approaches to represent geographic processes and events in GIS databases to support space-time query, analytics, and knowledge discovery. Her research has been supported by NSF, NASA, Department of Defense, Department of Homeland Security, Department of Justice, Department of Energy, Environmental Protection Agency, National Oceanic and Atmospheric Administration, United States Geological Survey, National Institute of Standards and Technology and state government agencies in the U.S.A. She recently founded the Geospatial Analytics and Innovative Applications (GAIA) Lab at UT-Dallas. She and her students are exploring ways to capture and apply the concepts of place for space-time representation and analysis.

Prof. Qing-Quan LI, Shenzhen University

Prof. Qing-Quan Li, the Academician of International Eurasian Academy of Sciences, and the President of Shenzhen University since 2013. Before that, Prof. Li was the vice president of Wuhan University, and the director of the Transportation Research Center at Wuhan University. Prof. Li's research interests are spatial-temporal data analysis, multi-sensor integration, industry and engineering surveying. He has lea over 50 research projects, published 5 books/chapters and over 400 research papers, and serves on the editorial board of a number of academic journals. In recognition of his research achievements, he was awarded varies national and professional prizes.

Prof. Mei-Po KWAN, University of Illinois at Urbana-Champaign

Prof. Mei-Po KWAN is a Professor of Geography and Geographic Information Science. Her research addresses health, social, transportation, and environmental issues in urban areas through the application of innovative GIS methods. She is interested in understanding how social differences (e.g., gender, race, ethnicity, and religion) shape urban residents' everyday experiences and perceptions/use of the built environment. Her research interests include environmental health, human mobility, access to healthcare, neighborhood effects, sustainable travel and cities, and application of GIS methods in geographic research. She has received over $24 million grants as PI or Co-PI from sources including the National Science Foundation, the National Institutes of Health, the U.S. Department of Transportation, and the William T. Grant Foundation. She is currently Editor of the Annals of the Association of American Geographers and the book series entitled "SAGE Advances in Geographic Information Science and Technology."

Prof. Shih-Lung SHAW, The University of Tennessee, Knoxville

Dr. Shih-Lung Shaw is Alvin and Sally Beaman Professor and Arts and Sciences Excellence Professor of Geography as well as the Director of Confucius Institute at the University of Tennessee, Knoxville. He received his Ph.D. and M.A. degrees from The Ohio State University and his B.S. degree from National Taiwan University. His research interests cover GIS for transportation (GIS-T), space-time GIS, time geography, transportation planning and modeling, and human dynamics. His recent research has focused on space-time analytics of human dynamics in a hybrid physical-virtual world based on various types of individual tracking data such as cell phone data, taxi tracking data, travel-activity survey data, and online social media data. Dr. Shaw currently represents the University Consortium for Geographic Information Science (UCGIS) as an expert panel member to review the U.S. National Spatial Data Infrastructure (NSDI) for the Coalition of Geospatial Organizations. He also serves on the editorial board of International Journal of Geographical Information Science, Journal of Transport Geography, Travel Behaviour and Society, and Geographical Research (China). Dr. Shaw is a Faculty Fellow of the Center for Transportation Research and an affiliated faculty of the Center for Intelligent Systems and Machine Learning and the Center for Sustainable Business and Tourism at the University of Tennessee, Knoxville. He is also appointed as a Guest Professor of Wuhan University and Southeast University in China and a Research Fellow of the Institute of Space and Earth Information Science at the Chinese University of Hong Kong. For additional information, please visit http://geography.utk.edu/about-us/faculty/dr-shih-lung-shaw/.

Abstracts of Keynote Speeches

GEOINFORMATICS FOR DRIVERLESS VEHICLES

Michael F. GOODCHILD

Department of Geography,
University of California, Santa Barbara

Abstract

Vehicle routing is currently supported by two geospatial databases: POI data to define origins and destinations, and street centerline data to define routes on public roads. At roughly 10m, accuracy levels are sufficient for current applications, especially when assisted by map-matching; and limiting origins and destinations to points is only occasionally troublesome. But driverless vehicles require numerous enhancements, and raise serious concerns over privacy. Moreover many of these enhancements would be valuable even for human-operated vehicles. The discussion is framed as an application of SLAM, and uses numerous examples to motivate a call for new research initiatives in this emerging area of urban informatics.

Abstracts of Keynote Speeches

Spatiotemporal big data analysis based on social sensing

Jianya GONG

School of Remote Sensing and Information Engineering,
Wuhan University

Abstract

With the rapid development of information and communications technology (ICT), ubiquitous social sensing data brings new opportunities for us to understand our socioeconomic environments. We use the term social sensing represent for studying the characteristics of human spatio-temporal behavior, and reveal the socio-economic environments by using various means of social sensing. This article introduces the concept of social sensing, social sensing techniques and perceives data, the associated analysis methods, and applications. Social sensing has brought us massive amounts of spatial data related to human. The spatio-temporal analysis for social sensing data is working for human's life, such as environment, emergency, economy, urban planning. In the coming big data era, GIScientists should investigate theories in using social sensing data, and develop new methodology to understand human activity based on social sensing.

Key words: social sensing; human activity; Big data;

Abstracts of Keynote Speeches

Urban Informatics and the High Frequency City

Michael BATTY

Centre for Advanced Spatial Analysis,
University College London

Abstract

The rapid evolution of information technologies to the point where most active citizens are able to access global information using personal devices is changing the city out of all recognition. This lecture will outline the ways in which such technologies are generating a new functioning of the city which we call 'urban informatics', and we will explore the implications of these developments for our understanding of the city and its design. Cities are now functioning over short periods using many kinds of sensor which are yielding vast volumes of data – big data – that is being used to control and manage many city functions in new and novel ways that are yielding more efficient and less costly ways organising economic and social activities. We term this focus on real time streaming of big data as the 'high frequency city' in contrast to previous examples of city planning that are much slower, lower frequency that is, dealing with change over much longer time periods. Urban informatics is not restricted to dealing simply with the high frequency city but this is our starting point although in time, both high and low frequency perspectives will define how we approach the management, control and design of future cities. After this context has been established, the lecture will select a variety of examples, many related to movement systems in cities that are being automated. We will identify the kinds of problems that can be informed by the new forms of analytics that are part of and parcel of smart city technologies, and speculate on how urban informatics will develop in the next 25 years.

Reference: Batty, M. (2017) Producing Smart Cities, in Kitchin, R., Lauriault, T. P., and Wilson, M. W. (Editors) **Understanding Spatial Media**, Sage, London, 204-215.

Abstracts of Keynote Speeches

Experiential Cities

May YUAN

School of Economic, Political, and Policy Sciences,
The University of Texas at Dallas

Abstract

Urban informatics emphasizes the use of data to advance our understanding of how cities work and ways to improve urban functions. With the proliferation of information and communication (IC) technologies and big data analytics, much progress has been made in creating real-time, personalized, location-based information services to mediate physical and cyber dimensions of urban infrastructure, social networks, and city living. Urban informatics enables new ways of engagement among technologies, people, and places. Popular research themes cover human movements from massive data of cellular call records, taxi trajectories, public transportation cards, etc., social network activities of Tweets, Four-Square check-ins, Reddit likes, etc. and city morphology from immense infrastructural measurements of transportation networks, power grids, waste management, etc. While these studies bring us novel insights into the interplay among IC technologies, human behaviors, and city functions, much remains buried about the experiences that shape people and places and help develop the identity of urban communities and urban places. When asked where one comes from and what the place is like, common responses would bring about what one did on a regular basis, participated in a singular event, or engaged in activities at sites with deep meanings to the individual. Experiential cities attend what people do and how what they do becomes collective experiences that shape their place. The presentation will enquire potential approaches to uncover experiential cities, explore examples, and research directions.

Abstracts of Keynote Speeches

Big Data and Algorithmic Uncertainty in Human Mobility Research

Mei-po KWAN

Department of Geography and Geographic Information Science,
University of Illinois at Urbana-Champaign

Abstract

In this presentation I argue that the advent of big data significantly increases the role of algorithms in the knowledge production process, especially in the data generation and preparation phase. Such increase in algorithmic mediation introduces much more uncertainty to the geographic knowledge generated when compared to traditional modes of geographic inquiry. Using examples from human mobility research with big cell phone and other datasets, the paper shows that many more tasks in the geographic knowledge production process are now performed by computerized algorithms. It reflects on the changes in the knowledge production process associated with the shift from using traditional data to using big data, and discusses various sources of algorithmic uncertainty.

Abstracts of Keynote Speeches

Human Dynamics Research with Urban Informatics – Some Lessons Learned

Shih-Lung SHAW

Department of Geography,
University of Tennessee Knoxville

Abstract

With increasing urbanization around the world, most urban areas are facing significant challenges ranging from air pollution, traffic congestion, economic development, affordable housing, water shortage, infrastructure degradation, to crime, health and social issues. Urban informatics is expected to help us better understand and address these urban challenges using modern technologies and data collected from various sources. It is important to note that infrastructure of build environments as well as various economic, financial, education, healthcare, and other public service systems in an urban area all are created to meet and serve human needs. When human needs cannot be properly met by these systems and services, we encounter urban problems. In the meantime, interactions between human needs and urban systems/services are two-way interactions. They mutually shape and are shaped by each other. Understanding human dynamics in an urban area therefore serves as a critical foundation to tackle various urban challenges with the data and tools available through urban informatics. Human dynamics is a slippery term and can be studied from different perspectives. This presentation will first discuss several different approaches to pursuing human dynamics research. It will then use lessons learned from previous research to suggest some specific aspects that deserve attention from the research community to move human dynamics research forward with the use of urban informatics.

Conference Programme

13th November 2017 (Mon) AM		
8:00 - 9:30	Registration	Z2/F podium
9:30 - 10:00	Opening Ceremony *Session Chair: Prof. Wen-zhong Shi, The Hong Kong Polytechnic University* Welcome Remarks *Ir Prof. Ping-kong Alexander Wai, Vice President (Research Development), The Hong Kong Polytechnic University* Opening Address *Mr. Kwok Wai, Paul Ng, Deputy Director / Survey and Mapping, Lands Department, The Government of the HKSAR*	Z207
10:00 - 10:30	**Keynote Speech 1**: Geoinformatics for Driverless Vehicles *Prof. Michael Goodchild, University of California, Santa Barbara*	
10:30 - 10:45	Group Photo	Z2/F podium
10:45 - 11:00	Coffee Break	
11:00 - 11:30	**Keynote Speech 2**: Big Data and Urban Informatics *Prof. Anthony Yeh, The University of Hong Kong, Hong Kong*	Z207
11:30 - 12:00	**Keynote Speech 3:** Spatiotemporal big data analysis based on social sensing *Prof. Jianya Gong, Wuhan University, China*	
12:00 – 13:30	Lunch *Sponsored by: A & P Instrument Co., Ltd*	Z2/F podium

13th November 2017 (Mon) PM		
	Session 1: Urban Sensing *Session Chair: Prof. Liu Yaolin, Wuhan University*	
13:30 – 14:00	Land Surface Temperature Inversion And The Urban Heat Island Response Mechanism Of Xi'an City Based On TM/ETM+ Images (39) *Boyan Li, et. al, Wuhan University, China*	Z503
14:00 – 14:30	Discovering Urban Functional Regions Using Latent Semantic Information: Spatiotemporal Data Mining Of Floating Cars GPS Data Of Guangzhou (20) *Xuliang Li, et. al, Sun Yat-Sen University, China*	
14:30 – 15:00	Study On The Relationship Between Urban Physical Environment And Human Behavior Pattern Based On Remote Sensing And Social Media Data (17) *Fangyi Cai, et. al, The Hong Kong Polytechnic University, HK*	
15:00 - 15:30	The Application Of Change Detection Technique In Urban Area (35) *Huifang Zhang, et. al, Wuhan University, China*	
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	Session 2: Urban Planning I *Session Chair: Dr. Christopher Higgins, The Hong Kong Polytechnic University*	
15:45 – 16:15	Accessibility, Air Pollution, And Net Land Value Uplift From Highway Infrastructure (11) *Christopher Higgins, The Hong Kong Polytechnic University, HK*	Z503
16:15 – 16:45	Spatial Representation of Solar Rights For Individual House Unit (O1) *Lei Yuan, et. al, Wuhan University, China*	
16:45 – 17:15	The Identification of Nanjing Urban Function Area Based on Point of Interest Data (POI): A Case Study of Nanjing (6) *Ge Shi, et. al, Nanjing Normal University, China*	
17:15 – 17:45	Impact Of Location Based Social Network On Business Site Selection (31) *Xiaolin Zhou, et. al, The Hong Kong Polytechnic University, HK*	
18:00 - 20:00	Conference Banquet	Staff Club, PolyU

14th November 2017 (Tue) AM		
9:00 - 9:30	**Keynote Speech 4**: Urban Informatics and the High Frequency City *Prof. Michael Batty, University College London, UK*	Z206
	Session 3: Geospatial Data Management, 3D GIS And Deep Learning *Session Chair: Dr. Bo Wu, The Hong Kong Polytechnic University*	
9:30 – 10:00	Combining High Resolution Optical And SAR Data For Urban Land Cover Classification Using A Deep Convolutional Network (5) *Hongsheng Zhang, et. al, The Chinese University of Hong Kong, HK*	Z206
10:00 – 10:30	Building Classification Based On LiDAR And High-Resolution Image (22) *Qingli Shi, et. al, Sun Yat-Sen University, China*	
10:30 – 11:00	Integration Of Aerial Oblique Imagery And Ground Mobile Mapping Data For Improved 3d Mapping And Modelling In Urban Areas (36) *Bo Wu, The Hong Kong Polytechnic University, HK*	
11:00 – 11:30	Three Dimensional Digital City Based On Hololens (21) *Xingxing Wu, et. al, Wuhan University, China*	
11:30 - 11:45	Coffee Break	
	Session 4: Uncertainty & Contexts In Urban Data Analytics *Session Chair: Prof. May Yuan, The University of Texas at Dallas*	
11:45 – 12:15	**Session Keynote Speech**: Experiential Cities *Prof. May Yuan, The University of Texas at Dallas, USA*	Z206
12:15 – 12:45	Understanding The Effect Of The Modifiable Areal Unit Problem On Self-Containment Of Employment And Jobs-Housing Balance Using Big Data (12) *Joseph Xingang Zhou, et. al, The University of Hong Kong, HK*	
12:45 – 13:15	Mining Significant Spatial Association Rules with Genetic Algorithm (32) *Anshu Zhang, The Hong Kong Polytechnic University, HK*	
13:15 – 14:30	Lunch	

14th November 2017 (Tue) PM		
	Session 5: Health, Well-Being And Governance *Session Chair: Prof. Qingquan Li, Shenzhen University*	
14:30 – 15:00	**Session Keynote Speech**: Research and Education on Urban Informatics - Innovations at Shenzhen University *Prof. Qingquan Li, et. al, Shenzhen University, China*	Z206
15:00 – 15:30	Bigger Is Better? An Empirical Analysis Of City Compactness And Spatial Autocorrelation In Guangdong Province (16) *Qian Xu, Jinan University, China*	
15:30 – 16:00	Identification Of Typical Diurnal Patterns For Clear-Sky Climatology Of Surface Urban Heat Island (18) *Jiameng Lai, et. al, Nanjing University, China*	
16:00 – 16:15	Coffee Break	
	Session Chair: Prof. Zhu Qing, Southwest Jiaotong University	
16:15 – 16:45	Augmented Spatial Participation: Role Of Facebook And Twitter In Protests (9) *Seungho Yoo, University College London, UK*	Z206
16:45 – 17:15	Pollution Characteristics of Atmospheric Particulate Matter in Cities of China (30) *Yuanyuan Huang, et. al, China University of Mining and Technology, China*	
17:15 – 17:45	An Urban Policy Evaluation Tool For Improving Urban Governance And Well-Being (15) *Jian Yi, et. al, The Hong Kong Polytechnic University, HK*	

15th November 2017 (Wed) AM		
	Session 6: Transportation & Human Dynamics I *Session Chair: Prof. Mei-po Kwan, University of Illinois at Urbana-Champaign*	
9:00 – 9:30	**Session Keynote Speech**: Big Data and Algorithmic Uncertainty in Human Mobility Research *Prof. Mei-po Kwan, University of Illinois at Urbana-Champaign, US*	Z503
9:30 – 10:00	Understanding the Impacts of Human Mobility on Accessibility using Massive Mobile Phone Tracking Data (24) *Bi-yu Chen, et. al, Wuhan University, China*	
10:00 – 10:30	Visual Analytics of Micro Moving Behaviour based on GPS Trajectories (25) *Min Lu, ShenZhen University, China*	
10:30 – 10:45	Coffee Break	
	Session 7: Transportation & Human Dynamics II *Session Chair: Prof. Shih-lung Shaw, The University of Tennessee*	
10:45 – 11:15	**Session Keynote Speech**: Human Dynamics Research with Urban Informatics - Some Lessons Learned *Prof. Shih-lung Shaw, The University of Tennessee, US*	Z503
11:15 – 11:45	A Network-Based Linear Tessellation For Automatically Identifying Urban Street Patterns (27) *Yakun He, et. al, Wuhan University, China*	
11:45 – 12:15	Precise Space-Time Interventions On Intra-Urban Dengue Outbreaks Using Large-Scale Mobile Phone Tracking Data (37) *Ling Yin, et. al, Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, China*	
12:15 – 12:45	MPDA: A Method of Detecting Mixed Periodic Patterns From Moving Object Data (38) *Jun Li, et. al, China University of Mining and Technology, China*	
12:45 – 13:45	Lunch	

15th November 2017 (Wed) PM		
	Session 8: Urban Planning II *Session Chair: Dr. Zhizhao Liu, The Hong Kong Polytechnic University*	
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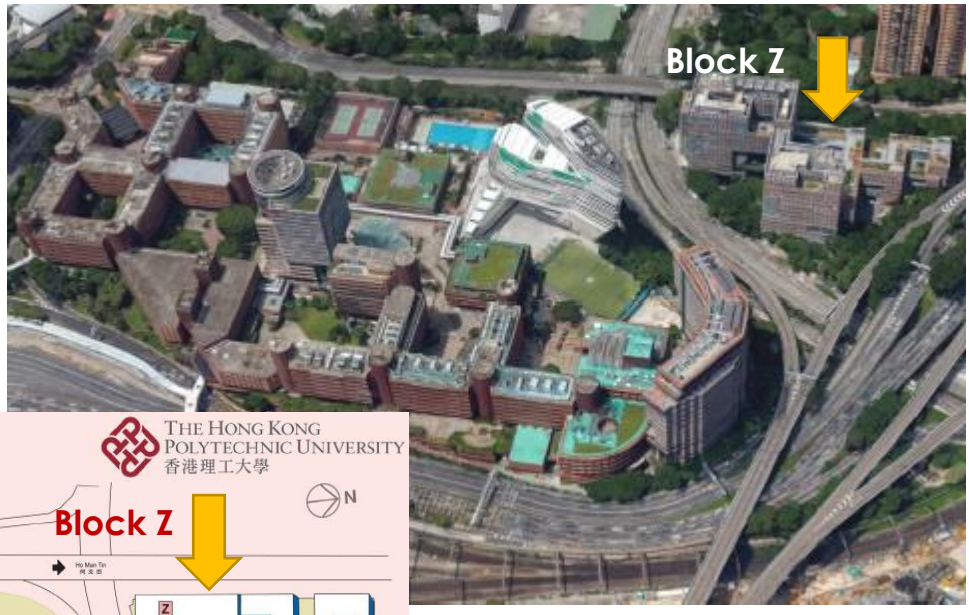
14:15 – 14:45	Road Centrality And Urban Landscape Patterns In Wuhan City, China (13) *Yanfang Liu, et. al, Wuhan University, China*	
14:45 – 15:15	Effects of Weather Conditions on Walkability: A Review Study (33) *Zhizhao Liu, et. al, The Hong Kong Polytechnic University, HK*	
15:15 – 16:15	**Panel Discussion**: Research Initiatives in Urban Informatics *Moderator: Prof. Wen-zhong Shi, The Hong Kong Polytechnic University*	
16:15 - 16:30	Best Paper Award Presentation & Closing	

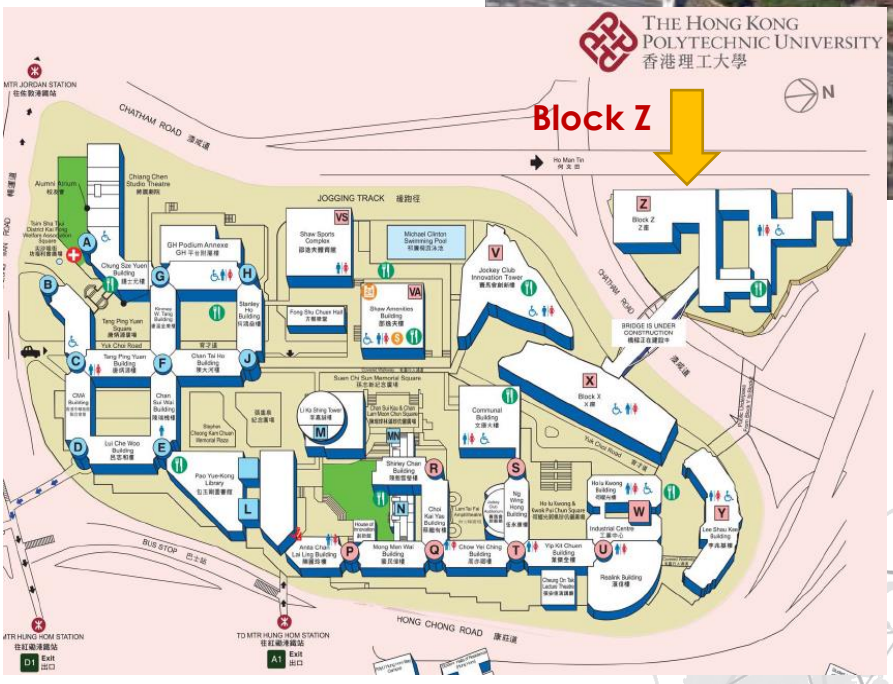
*The conference will be broadcasted simultaneously at ZN607.

The programme is subject to change.

Location of the Conference Venue

13 Nov 2017 Mon	AM	Z207, 2/F, Block Z, The Hong Kong Polytechnic University
	PM	Z503, 5/F, Block Z, The Hong Kong Polytechnic University
14 Nov 2017 Tue		Z206, 2/F, Block Z, The Hong Kong Polytechnic University
15 Nov 2017Wed		Z503, 5/F, Block Z, The Hong Kong Polytechnic University





Venue for Conference Banquet on 13 November 2017 (Mon)

- Staff Club, 5/F, Communal Building, The Hong Kong Polytechnic University

Venue for Lunch on 14 November 2017 (Tue)

- Chinese Garden (南北小廚), 4/F, Communal Building, The Hong Kong Polytechnic University

Useful Information

Registration

The Registration Desk is located in the Block Z 2/F Podium. The registration desk will be staffed during the following hours:

Monday, 13 Nov 2017 8:00 – 11:30 am

Presentation Tips

Each presentation should be ***within 30 minutes*** including preparation, presentation and Q&A. Speakers are suggested to make their presentation within 25 minutes.

- You can typically present about 20-25 slides at a pace that listeners can comfortably follow.
- If you have any concerns about setting up your presentation, please go to the session room 15 minutes before the start of your session to 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 don't hesitate to ask us for help. We will do what it takes to get you up and going.
- Please note at the closing of the conference (15 Nov), our Chair will present the Best Paper Award for each session.

Audio Visual Equipment Available On-Site for Presenters

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. You might just bring the memory stick which contains your presentation file. The operating system is Microsoft Windows 10 and Microsoft Office 2010 is installed. Make sure your presentation file is compatible with the system and software.

Session Chair Guidelines

- Please arrive at the session room 15 minutes prior to the scheduled starting time.
- Inform the presenters of the maximum time that they can use for their presentation. The 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.
- When introducing the session - please tell the audience how many papers will be presented, how long each presentation will be and when there will be time for questions.
- For each presentation, 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.

Transportation Information

To PolyU from Hong Kong International Airport

- From HK airport, you may take a taxi directly to the PolyU campus. The total taxi cost should be about HK$300 (about US$40);
- Or you can take the Airport Express Railway at Airport. The ticket can be purchased at the Airport at a price of HK$90. The Airport Express train stops at several stations. Your destination station is "Kowloon station". From Airport to Kowloon station, the train takes about 21 minutes. After you get off the train at Kowloon station, you can then take a taxi to the PolyU. The taxi will be about HK$60 and about 15-20 minute driving.

To PolyU from Chinese Mainland

If you are coming to PolyU from Chinese Mainland, you may first arrive at ShenZhen. Commonly, there are three Checkpoints to enter Hong Kong, FuTian Checkpoint (6:40-22:30), and LuoHu Checkpoint (6:00-24:00).

- From Shenzhen Airport: by bus Airport Express 330 to LuoHu Station. Then go through LuoHu Checkpoint, and take MTR East Rail Line to Hung Hom Station.
- From ShenZhen Airport: take a taxi to FuTian Checkpoint/LuoHu Checkpoint, then take MTR East Rail Line to Hung Hom Station.
- From ShenZhen Railway Station at LuoHu: Directly go through the LuoHu Checkpoint and take the MTR East Rail Line to Hung Hom station.

Local Transport to PolyU

- Mass Transit Railway (MTR): Get off at Hung Hom station at Exit A and follow the signage directing to The Hong Kong Polytechnic University and conference venue at Block Z;
- Bus: Take any tunnel bus passing Hong Kong Cross Harbour Tunnel, get off at the bus stop right after crossing the Tunnel. Take the footbridge leading to the podium of the University, and follow the directional signage for Block Z on campus.

Useful Contacts

Conference

- Department of Land Surveying & Geo-Informatics, PolyU
  Rm. ZS621 Tel: (852) 2766-5968 (Office Hrs.)
- Conference Secretary Tel: (852) 3400 8158

Emergency

- Emergency Service (Police, Fire, Ambulance): 999

Tourist Information

- Hong Kong Tourism Board website, www.discoverhongkong.com
- Laser show in Central and Tsim Sha Tsui every night at 8 pm, www.tourism.gov.hk/symphony

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 the University Health Service of PolyU:
University Health Service Room A001, G/F, Chung Sze Yuen Building
Tel: 2766-5433

Thank you for your support to ICUI 2017!