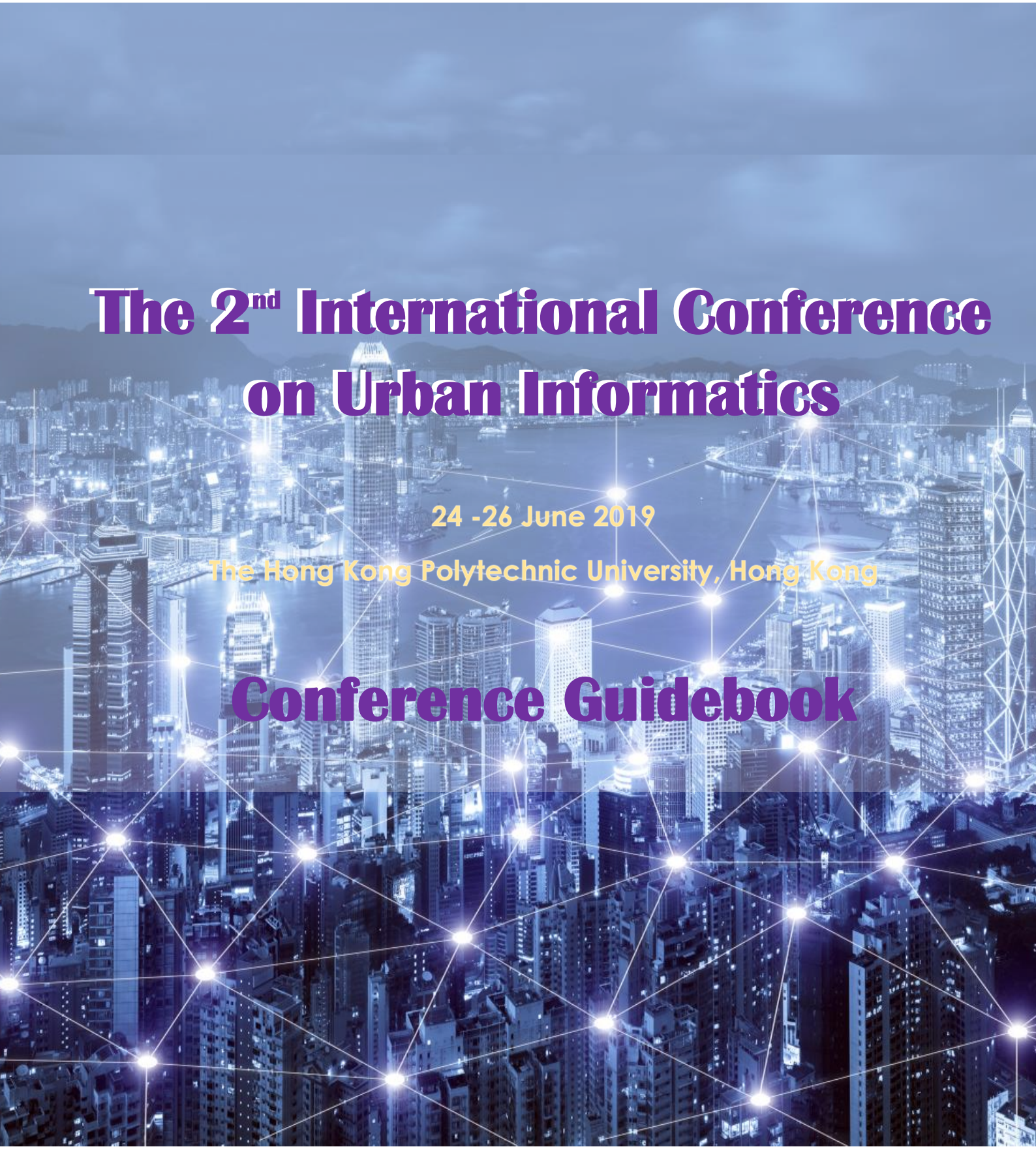

The 2nd International Conference on Urban Informatics

24 -26 June 2019

The Hong Kong Polytechnic University, Hong Kong

Conference Guidebook

Organized by:

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

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Organizing Committee

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- Dr. Yick-cheung Matthew PANG, The Hong Kong Polytechnic University
- Dr. Anshu ZHANG, The Hong Kong Polytechnic University

Programme At-a-Glance

24th June 2019 (Mon)		
8:30 - 9:15	Registration @ *Z2/F podium, Block Z, PolyU*	Z2/F podium
9:15 - 9:30	Opening Ceremony	Z209
9:30 - 10:00	**Keynote Speech 1**	
10:00 - 10:30	Group Photo & Coffee Break	Z2/F podium
10:30 - 12:00	**Keynote Speech 2, 3 & 4**	Z209
12:00 – 13:30	Lunch *@ Chinese Restaurant, 4/F, Communal Building*	
13:30 – 16:00 (Parallel Sessions)	*Sessions:* *1) Smart Governance @Z207* *2.1) Transports System I @Z206* *3) Urban Metabolisms @Z208* *4.1) Urban Spatial Structure I @Z204*	Z2/F
16:00 – 16:15	Coffee Break	Z2/F podium
16:15 – 18:00 (Parallel Sessions)	*Sessions:* *5.1) Smart Cities and Urban Science I @Z207* *2.2) Transport Systems II @Z206* *6) Ambient Sensing and Urban Positioning @Z208* *4.2) Urban Spatial Structure II @Z204*	Z2/F
18:30 - 21:00	Conference Banquet *@ King Yat Hin, Level 8, Harbour Plaza Metropolis Hotel,7 Metropolis Drive, Hung Hom*	-
25th June 2019 (Tue)		
9:00 - 10:30	**Keynote Speech 5, 6 & 7**	Z207
10:30 - 10:45	Coffee Break	Z2/F podium
10:45 – 12:00 (Parallel Sessions)	*Sessions:* *5.2) Smart Cities and Urban Science II @Z207* *7) Smart Mobility @Z206* *8) Housing @Z208* *9.1) Spatial Data Infrastructure (SDI) I @Z204*	Z2/F
12:15 - 14:00	Lunch *@ Chinese Restaurant, 4/F, Communal Building*	
14:00 - 15:50	*Session:* *10.1) Urban Remote Sensing I @Z207* *11) A.I. & Urban Model I @Z206* *13) Transport and Urban Ecology @Z208* *9.2) Spatial Data Infrastructure (SDI) II @Z204*	Z2/F
15:50 - 16:05	Coffee Break	Z2/F podium

16:05 – 18:05	*Sessions:* *10.2) Urban Remote Sensing II @Z207* *12) A.I. & Urban Model II @Z206* *14) Urban Positioning @Z208* *15) Human Health and Well-being @Z204*	Z2/F
26th June 2019 (Wed)		
9:00 – 10:00	**Keynote Speech 8 & 9**	Z207
10:00 – 11:20 (Parallel Sessions)	**Dialogue with Journal Editors**	
	Sessions: *16.1) Urban Technologies and Principles I @Z207* *16.2) Urban Technologies and Principles II @Z208* *17) Urban Big Data and Cloud Computing @Z206* *10.3) Urban Remote Sensing III @Z204*	Z2/F
11:20 – 11:55	Coffee Break	Z2/F podium
11:35 – 13:35 (Parallel Sessions)	*Sessions:* *16.3) Urban Technologies and Principles III @Z208* *18) Pollution @Z206* *19) Urban Risks and Resilience @Z204*	Z2/F
13:35 – 14:00	*Light Lunch*	Z2/F podium
14:00 – 14:30	Awards Presentation & Closing	Z207
15:00 – 18:30	Social Event to the Peak (register by 14:00, 24 June at registration counter) *Gather at 14:45 @ outside Z207* *Coach returns at 18:30 (Arrived PolyU at around 19:15)*	-
27th June 2019 (Thu) – Post-Conference Workshop (by Online registration before)		
7:30	**Departure from PolyU -> Shenzhen University** **By Coach** **@ G/F, Y Core**	-
8:45-12:30	Workshop	Shenzhen University
12:30-14:30	Lunch	Shenzhen University
14:30-17:00	Field Trip @ Shenzhen Intelligent Operations Center	-
17:30-19:00	Return Coach to HK PolyU	-

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. 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) and The New Science of Cities (MIT Press, 2013). Both books won the Alonso Prize of the North American Regional Science Association. His most recent book Inventing Future Cities was published by MIT Press in late 2018.
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. Prior to his current position, he was Professor of City Planning and Dean of the School of Environmental Design at the University of Wales at Cardiff from 1979 to 1990 and then Director of the National Center for Geographic Information and Analysis at the State University of New York at Buffalo from 1990 to 1995. 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. In 2018, he was awarded the Waldo Tobler prize for GI Science of the Austrian Academy of Sciences and in 2019, he was elected as a Fellow of the Regional Science Association.

Prof. Carlo RATTI

MIT Senseable City Lab

An architect and engineer by training, Professor Carlo Ratti teaches at MIT, where he directs the Senseable City Laboratory, and is a founding partner of the international design and innovation practice Carlo Ratti Associati. A leading voice in the debate on new technologies' impact on urban life, his work has been exhibited in several venues worldwide, including the Venice Biennale, New York's MoMA, London's Science Museum, and Barcelona's Design Museum. Two of his projects – the Digital Water Pavilion and the Copenhagen Wheel – were hailed by Time Magazine as 'Best Inventions of the Year'. He has been included in Wired Magazine's 'Smart List: 50 people who will change the world'. He is currently serving as co-chair of the World Economic Forum's Global Future Councilon Cities and Urbanization, and as special advisor on Urban Innovation to the European Commission.
For further information visit www.carloratti.com and senseable.mit.edu

Prof. Anthony G.O. YEH

The University of Hong Kong

Prof. 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. Professor Renzhong GUO

Shenzhen University

Prof. Renzhong GUO was born in Jiangsu, China. He is member of the Chinese Academy of Engineering. He received the B.S. and M.S. degrees from Wuhan University, Wuhan, China, in 1984, and the Ph.D. degree in Geography from University of Franche-Comté, Besançon, France, in 1990. He is currently a professor and the dean of the Research Institute for Smart Cities, School of Architecture and Urban Planning, Shenzhen University, Shenzhen, China.

He has been engaged in research and development of Cartography, GIS, and Construction Strategy of Digital City for a long time. Great achievements are also be made in theories and methods of Geographical Information System, Information Engineering of Land Resource Management.

Prof. Qingquan LI

Shenzhen University

Prof. Li Qingquan, President of Shenzhen University. He is professor, doctor in engineering and doctoral supervisor. Professor Li is a chief scientist of national “973 project”and “863 project”. As a national talent, he is a member of the Science and Technology Committee of the Ministry of Education, an academician of the Eurasian Academy of Sciences, a winner of the He Liang Heli Science and Technology Progress Award, and the recipient of the State Council special allowance.

Professor Li is Vice Chairman of China Society of Surveying and Mapping, and Vice Chairman of China Geographic Information Industry Association. He has long been engaged in the theoretical and applied research of dynamic precision engineering measurement, he also has combined surveying and mapping theory with information tools and engineering problems so as to conduct multidisciplinary research. As a result, he has constructed dynamic precision engineering measurement theory and method, created technical methods for major engineering applications such as high-precision dynamic detection of roads, digital restoration of cultural heritages, and detection of urban dynamic change laws. He has brought about the basic research (thesis) to technical methods (patents) to Systematic innovation in equipment development (products). He has exerted a great influence on the field of precision engineering measurement in China.

He has presided over more than 50 scientific research projects, authorized 26 invention patents, accepted 31 invention patents, published 5 monographs, published more than 300 journal articles (more than 100 SCI/SSCI articles). He also achieved the second prize of the National Technology Invention, the second prize of the National Science and Technology Progress Award, the National Science and Technology Progress Innovation Team Award and so on.

Prof. Chenghu ZHOU

State Kev Laboratorv of Resources and Environment Information System, China

Prof. Chenghu Zhou is an academician of CAS and Research Professor and Deputy Director of the Institute of Geographical Sciences and Natural Resources, CAS; he is also the Director of the State Key Laboratory of Resources and Environment Information System.He is one of IGU Vice-President and the vice-chair of the commission on Geographical Information Science. He chairs the Environmental Remote Sensing Division and Hydrology Commission of the Chinese Geography Society; and Professional Committee of Chinese GIS Association. He is a member of the expert panel of China 863 Program in marine sciences;invited honorary commissioner of the Ministry of Land and Resources. His major research interests include spatial and temporal data mining, geographic modeling, hydrology and water resources and geographic information systems and remote sensing applications. He organized and participated in some key programs and projects such as "Remote sensing monitoring of major natural disaster events and its operational evaluation", "Comprehensive Environmental Remote Sensing study of Hong Kong","Multi-Resolution Land Use & Land Cover study". In the past 5 years, he was awarded with four National S&T Progress Awards (second place); three provincial and Ministry level Science and Technology awards (first prize).

Dr. Ying JIN

University of Cambridge

Dr. Ying Jin is a University Reader in Architecture and Urbanism at Cambridge. He first developed a practitioner career as a specialist consultant on land use planning, transport modelling and collaborative urban design in the UK, Europe, Asia, Latin America and the World Bank. He returned to teaching in 2009 at Cambridge, and since 2012 leads the research there on predictive models for planning and design in cities. Ying is currently working on model-based radical development scenarios for the UK2070 Commission, an inquiry into regional inequalities and a new framework for action across the countries in the UK. He is the Director of the Martin Centre, a leading academic institution on land use, built form and integrative design for more than 50 years. He is also an active member of several interdisciplinary Cambridge initiatives, including his appointment as an inaugural Visiting Fellow at the Bennett Institute for Public Policy.

Prof. John Wen-zhong SHI

The Hong Kong Polytechnic University

Prof Shi is Head of Department of Land Surveying and Geo-Informatics, Otto Poon Charitable Foundation Professor in Urban Informatics, Chair Professor in GISci and remote sensing, Director of Laboratory for Smart City and Spatial Big Data Analytics, The Hong Kong Polytechnic University. He obtained his doctoral degree from University of Osnabrück in Vechta, Germany in 1994.

Prof Shi's current research interests are in the areas of urban informatics for Smart Cities, GISci and remote sensing with focusing on analytics and quality control for spatial big data, object extraction and change detection from satellite images and LiDAR data, integrated mobile mapping technology, and 3D and dynamic GISci modelling.

Prof Shi served as President of Commission II for International Society for Photogrammetry and Remote Sensing (2008-2012), President for Hong Kong Geographic Information System Association (2001-2003). He also serves as an editorial board member for a number of international journals. He has published more than 400 scientific articles (with over 200 SCI papers) and 15 books. He received a number of prestige awards, including an award from International Society of Photogrammetry and Remote Sensing and Natural Science Award from the State Council, China.

Abstracts of Keynote Speeches

ENHANCING URBAN MOBILITY

Prof. Michael F. GOODCHILD

Department of Geography,
University of California, Santa Barbara

Abstract

Many factors limit mobility in the city of today. Individual mobility profiles are critical, especially for the aging and mobility impaired, and especially in vertical cities such as Hong Kong. These in turn interact with modal choice. Urban informatics is an important key to enhancing mobility. I discuss ways in which improved informatics, especially at finer spatial, temporal, and thematic resolutions, can not only enhance future mobility but also greatly improve mobility in the city of today.

Abstracts of Keynote Speeches

URBAN INFORMATICS AND THE HIGH FREQUENCY CITY

Prof. Michael BATTY

Centre for Advanced Spatial Analysis,
University College London

Abstract

Smart cities can be defined as urban environments in which digital technologies are playing an increasing role in the actual functioning of those environments. Such technologies are beginning to be embedded in many functions that take place in cities from the actual building fabric itself to the various services that define production and consumption as well as leisure and entertainment. The ways in which cities have been defined, measured and simulated in the last 50 years has also been influenced by the emergence of new digital technologies, in particular models and simulations, and a whole array of analytic techniques that attempt to explain the functioning of cities. Currently there is a very strong convergence between the embedding of technologies into cities that are changing their locational structure and their movement patterns (… this is the 'smart city') and the use of these same technologies to enable such structures to be simulated (… this is what we might call 'urban analytics'). In short, digital technologies are being used to simulate systems composed of those same digital technologies. This convergence is in fact stronger than might appear at first sight in that urban analytics is becoming ever more embedded in the very technologies that we are attempting to represent and simulate, and there is a sense in which we can no longer understand the city without considering our models as being an integral part of the city we are attempting to explain. This raises the notion of the 'digital twin', the idea that the models we are using to explain the system in question are increasingly the same as the system itself. We will elaborate this thesis in this talk, drawing examples from the models we are currently building to explain and predict the future of large cities.

Reference: Batty, M. (2019) Urban analytics defined, Environment and Planning B: Urban Analytics and City Science, 46(3) 403–405.

Abstracts of Keynote Speeches

SENSEABLE CITIES

Prof. Carlo RATTI

Director, MIT Senseable City Lab
Founding Partner, Carlo Ratti Associati, USA

Abstract

The way we live, work, and play is very different today than it was just a few decades ago, thanks in large part to a network of connectivity that now encompasses most people on the planet. In a similar way, today we are at the beginning of a new technological revolution: the Internet is entering the physical space – the traditional domain of architecture and design – becoming an "Internet of Things" or IoT. As such, it is opening the door to a variety of applications that – in a similar way to what happened with the first wave of the Internet - can encompass many domains: from energy to mobility, from production to citizen participation. The contribution from Prof. Carlo Ratti will address these issues from a critical point of view through projects by the Senseable City Laboratory, a research initiative at the Massachusetts Institute of Technology, and the design office Carlo Ratti Associati.

Abstracts of Keynote Speeches

Transport GIS for Future Smart Cities

Prof. Anthony G.O. YEH

Academician of the Chinese Academy of Sciences;
Chan To Haan Professor in Urban Planning and Design and Chair Professor of the Department of Urban Planning and Design, The University of Hong Kong, Hong Kong

Abstract

The construction of smart cities has now become a goal commonly pursued by cities around the world. However, how build a viable smart city is still a topic worthy of further study and discussion. The key to building a smart city is the application of smart sensors and technology and related information technology in urban management and transportation. Strengthening the links between virtual cities and physical cities – the digital twin, such as information integration of urban road signs and urban planning and design systems, and building government-standardized geographic information coding, is an important means of building smart cities.

The development of indoor and outdoor positioning sensors and automatic vehicles has provided technical support for the development of smart transportation in smart cities. However, these technologies alone are not enough to realize the development of smart transportation in smart cities. They must be supported by GIS data before they can be implemented. The manual methods used to create and update them are not only costly but also time consuming. Vehicle and pedestrian navigation in smart cities need to automatically extract and update GIS navigation information from GIS and BIM in order to effectively realize the development of smart transportation in smart cities. Outdoor and indoor navigation paths can be viewed as a combination of polygons. Vehicle and pedestrian navigation paths can also be automatically generated and updated using polygonization methods in GIS and BIM.

Abstracts of Keynote Speeches

SMART CITIES AND NEW URBAN SCIENCE

Prof. Renzhong GUO

Academician of Chinese Academy of Engineering;
Dean of Research Institute for Smart Cities, Shenzhen University, China

Abstract

Urbanization and informatization are key themes in the world development. Urbanization is an ongoing process, with 55 % of the world's population residing in urban areas in 2018, and 68 % of the world's population is estimated to be urban by 2050. The process of urbanization has been accompanied with a set of unsustainable issues, including urban flooding, traffic congestion, and environmental pollution. The essence of these problems is that the city is a complex giant system. The complexity of the city has been beyond what human abilities can handle with traditional methods. Smart city is an important approach to solving urban problems, in which new Information and Communication Technologies (ICT) play major roles. In addition to ICT techniques, establishing new cognition and exploring new paradigms of urban science are also required for building smart cities.

Abstracts of Keynote Speeches

RESEARCH PROGRESS AND CHALLENGES IN PAN-SPACE INFORMATION SYSTEM

Prof. Chenghu ZHOU

Academician of Chinese Academy of Sciences;
Research Professor and Deputy Director of the Institute of Geographical Sciences and Natural Resources;
Director of the State Key Laboratory of Resources and Environment Information System, China

Abstract

Abstracts of Keynote Speeches

SOME THOUGHTS ON UNDERGRADUATE EDUCATION & RESEARCH IN URBAN INFORMATICS

Prof. Qing-Quan LI

President
Shenzhen University

Abstract

Urban informatics is a typical convergence research which focuses on solving urban problems by integrating knowledge, methods, and expertise typically from geomatics, computer science, and urban science. Related researches have been carried out for nearly a decade, however, a common framework is still in development. In 2017, Shenzhen University (SZU) launched a new undergraduate major, Urban Informatics, to meet the increasing demands from both IT companies and government sections. This program brings together intellectually-diverse researchers to develop a comprehensive curriculum and conduct researches with experts from urban planning, transportation, disaster management sections, and also high-tech companies. In this talk, Prof. Li will share some thoughts and practice from SZU experiences.

Abstracts of Keynote Speeches

A NEW APPROACH TO MAPPING SPATIAL VARIATIONS IN TRAVEL CHOICES

Dr. Jing YIN
University Reader
Director of the Martin Centre for Architectural and Urban Studies, University of Cambridge
Fellow and Director of Studies at Robinson College, Cambridge

Abstract

This paper presents a new approach that combines structural equation modelling and latent class categorisation to reveal, for the first time, detailed spatial variations in travel choices that pinpoint key locations and issues for making a step change in sustainable travel. Applying the approach to the UK, this paper further presents an example on how the methods may be utilised in other countries and regions for similar policy objectives.

Abstracts of Keynote Speeches

TOWARDS URBAN INFORMATICS

Prof. SHI, W. Z. John

Director, Lab for Smart City and Spatial Big Data Analytics
Head, Dept. of Land Surveying and Geo Informatics
The Hong Kong Polytechnic University

Abstract

Urban informatics is an interdisciplinary field of science and technology on people and place in the context of urban by combining urban science, computer science, information engineering, and geomatics. The reason that urban informatics can be a new discipline is that it has many domain problems in contemporary cities to be addressed scientifically, for instance, high energy consumption, housing, ageing population, traffic congestion, environmental pollution, urban hazards, and fast urbanization. To tackle these problems calls scientific and technology challenges, such as urban discovery, prediction and explanation; three-dimensional spatial data infrastructure (SDI); and working with uncertainties in spatial big data. Also, the development of urban informatics can be supported by latest ICT and geomatics technologies. Example of these technologies include SDI, internet of things, spatial big data analytics, cloud/ edge computing, artificial intelligence, remote sensing and modern mapping. Smart city is a key area of application for urban informatics. A series of smart city applications of urban informatics are introduced, with emphasis on smart governance based on Hong Kong SDI for transportation, human mobility and economy; smart environment based on satellite images for pollution and hazard monitoring; and seamless indoor and outdoor three-dimensional modeling and positioning.

Detailed Conference Programme

Location: 2/F, Block Z, PolyU

24 June 2019 (Mon) AM		
8:30 - 9:15	Registration *@ Z2/F podium, Block Z, PolyU*	Location
9:15 - 9:30	Opening Ceremony Welcome Remarks *Prof. Wen-zhong John SHI, Chair of Organizing Committee, ICUI 2019* Opening Address *Mr. Kin-wah Ray LEUNG, JP, Deputy Director, Lands Department, HKSAR Gov't*	Z209
9:30 - 10:00	**Keynote Speech 1**: Urban Analytics and Smart Cities *Prof. Michael BATTY, Bartlett Professor of Planning, University College London, UK*	
10:00 - 10:30	*Group Photo & Coffee Break @ Z2/F podium*	
10:30 - 11:00	**Keynote Speech 2**: Senseable Cities *Prof. Carlo RATTI, Director, MIT Senseable City Lab, Massachusetts Institute of Technology, USA*	Z209
11:00 - 11:30	**Keynote Speech 3:** A New Approach to Mapping Spatial Variations in Travel Choices *by Dr. Ying JIN, University Reader; Director of the Martin Centre for Architectural and Urban Studies, University of Cambridge, UK*	
11:30 - 12:00	**Keynote Speech 4:** Research Progress and Challenges in Pan-Space Information System *Prof. Chenghu ZHOU, Academician of Chinese Academy of Sciences; Director of the State Key Laboratory of Resources and Environment Information System, China*	
12:00 - 13:30	*Lunch @ Chinese Restaurant, 4/F, Communal Building*	

24 June 2019 (Mon) PM		
13:30 - 16:00 (Parallel Sessions)	**1) Smart Governance** 13:30 – 13:50: *<TBC> by Mr. Tony WONG, Office of the Government Chief Information Officer, HKSAR Gov't* 13:50 – 14:10: *<TBC> by Dr. Victor KHOO, Singapore Land Authority* 14:10 – 14:30: Reflections and Exploration on the Progress in Geographic Information Systems (GIS): An Urban Perspective *by Mrs. Wei SUN, Shenzhen Municipal Planning & Land & House Information Center, China* 14:30 – 14:50: Urban Geospatial Data Platforms *by Mr. Carsten ROENSDORF, Ordnance Survey, UK* 14:50 – 15:10: Map Application Programming Interfaces, a Building Block of Common Spatial Data Infrastructure for Urban Informatics *by Mr. Samuel NGAN, Lands Department, HKSAR Gov't* 15:10 – 15:30: 3D Planning and Design System: A New Planning Tool in the Digital Era *by Mr. Rico TSANG, Planning Department, HKSAR Gov't* 15:30 – 15:50: : Automatic Meter Reading (AMR) *by Mr. Kin-bong HO, Water Supplies Department, HKSAR Gov't*	Z207
	2.1) Transports System I 13:30 – 13:50: Investigating Local Travel Speed with Spatial Network Structures and Properties *by Dr. Yaoli WANG, Peking University, China* 13:50 – 14:10: Investigating Relationships between Bike-sharing and Public Transit: A Spatial-Temporal Approach *by Mr. Yuchuan HUANG, University of Minnesota, Twin Cities, US* 14:10 – 14:30: A Heuristic Roulette Gambling Method for Bus Line Planning Based on Trajectories Data of Large-scale Floating Cars *by Dr. Haixia MAO, Shenzhen Polytechnic, China* 14:30 – 14:50: An Approach for Filter Divergence Refraining in Sequential Data Assimilation and its Application in Short-term Traffic Flow Prediction *by Ms. Runjie WANG, The Hong Kong Polytechnic University, HK* 14:50 – 15:10: Study On the Quantitative Relationship Between Urban Traffic Congestion Point and its Adjacent Environment *by Mr. Sheng YE, Chongqing Geomatics Centre, China* 15:10 – 15:30: Quantifying the Shared Mobility Pattern and Electrification Potential in Beijing Using Massive GPS Trajectories *by Prof. Wei TU, Shenzhen University, China*	Z206
	3) Urban Metabolisms 13:30 – 13:50: Spatiotemporal Characteristics and Mechanism Analysis of Urban Multi-Year Real Estate Registration: A Case Study of Suzhou, China *by Prof. Changbin WU, Nanjing Normal University, China* 13:50 – 14:10: Study on the Transformation Path of Brownfield from the Perspective of Urban Renewal by *Dr. Haobing WANG, Southeast University, China* 14:10 – 14:30: Analysis on the Spatiotemporal Changes of the Coastline of Hainan Island from 1975 to 2018 *by Ms. Wanlu QIAN, Wuhan University, China* 14:30 – 14:50: How Does Assessor-Based Land Value Changes from 1972 – 2015: An Assessment Study of Land Valuation Practices in Baybay City, Philippines *by Mrs. Jannet BENCURE, Asian Institute of Technology, Thailand*	Z208
	4.1) Urban Spatial Structure I 13:30 – 13:50: Measuring Walking Accessibility to Public Open Space in a Multi-level Urban Environment *by Prof. Bo-sin TANG, The University of Hong Kong, HK* 13:50 – 14:10: Discovering City Functional Region and Human Mobility Patterns Using Mobile Phone Data *by Prof. Yuanyuan QIAO, Beijing University of Posts and Telecommunications, China* 14:10 – 14:30: An Empirical Study on 3D Space Syntax Using Wi-Fi Big Data *by Dr. Xintao LIU, The Hong Kong Polytechnic University, HK* 14:30 – 14:50: Modelling Spatial Non-Stationary Relationships in Housing Market with Incorporating Night-Time Light Data: A Case Study in Wuhan *by Ms. Jiayi XIE, Wuhan University, China* 14:50 – 15:10: A Study about Urban Space Vitality Characteristics in Shenzhen Based on Public Transportation Data *by Mr. Guangzhou WU, The Smart City Research Institution of China Electronic Technology Group Corporation, China* 15:10 – 15:30: The Influence of Spatial Evolution of Road Network Nodes on Urban Consumption Centers *by Ms. Yan HUANG, Wuhan University, China*	Z204
16:00 - 16:15	*Coffee Break*	

24 June (Mon) 16:15 - 18:00 (Parallel Sessions)	**5.1) Smart Cities and Urban Science I** 16:15 – 16:35: Moving from Smart to Responsive Cities: The Case of Zurich and Geneva *by Dr. Gerhard SCHROTTER, City of Zurich/ Public Administration, Switzerland* 16:35 – 16:55: Polycentric Urban Development and Urban Amenities *by Dr. Mingshu WANG, University of Twente, Netherlands* 16:55 – 17:15: Exploring Urban Metro Stations as Cognitive Places Using Points of Interest *by Dr. Kang LIU, Shenzhen Institutes of Advanced Technology, China* 17:15 – 17:35: The New Core of the City: The Community in the Context of Decentralization and Ideal Future Community Space Model Design *by Mr. Jian XU, The Smart City Research Institution of China Electronic Technology Group Corporation, China*	Z207
	2.2) Transport Systems II 16:15 – 16:35: Comparative Study of Grid Type Model and Less Transfer Model in Public Transport Network *by Prof. Yan Tao LI, Beijing Union University, China* 16:35 – 16:55: Measuring Neighborhood Walkability Under Streetscape of Central Shanghai Using Deep Learning: A Human-scale Approach *by Mr. Qinglai ZHANG, Tongji University, China* 16:55 – 17:15: The Impact of Rail Transit System Expansion on Spatial Distribution of Land Use and Employment: Evidence from Shanghai, China *by Ms. Mengqi ZHONG, Tongji University, China* 17:15 – 17:35: Traffic Accident Analysis based on Eigenvector Spatial Filtering Poisson Regression *by Ms. FengLan LUO, Wuhan University, China*	Z206
	6) Ambient Sensing and Urban Positioning 16:15 – 16:35: Progress and Prospect of the Research for Height Measurement Indoor *by Prof. Yunjia WANG, China University of Mining and Technology, China* 16:35 – 16:55: IoT-Based Tree Monitoring Approach Towards Extensive Urban Tree Management in The Smart City *by Dr. Man Sing, Charles WONG, The Hong Kong Polytechnic University, HK* 16:55 – 17:15: GNSS Shadow Matching for Smartphone Applications *by Dr. Li-Ta HSU, The Hong Kong Polytechnic University, HK* 17:15 – 17:35: Citythings: An Integration of the Dynamic Sensor Data to the 3D City Model *by Mr. Thunyathep SANTHANAVANICH, University of Applied Sciences, Stuttgart, Germany* 17:35 – 17:55: Indoor Positioning Based-On Image Aided by Artificial Neural Networks *by Ms. Chih-Yu CHANG, National Cheng Kung University, Taiwan*	Z208
	4.2) Urban Spatial Structure II 16:15 – 16:35: Spatial Agglomeration of the Non-Registered Migrants in Shenzhen: A Source Region Perspective *by Dr. Meihan JIN, Harbin Institute of Technology (Shenzhen), China* 16:35 – 16:55: Adaptive Detection of Multi-level Co-location Patterns Based on Natural Neighborhood *by Dr. Qiliang LIU, Central South University, China* 16:55 – 17:15: Accesses to Functional Mix: An Access Based Approach to Land Use Diversity Within the Context of Urban Spatial Resilience *by Mr. Darren NEL, The Hong Kong Polytechnic University, HK* 17:15 – 17:35: Spatial Structure Recognition and Characteristic Analysis of Zhenjiang Central City Based on POI Data *by Mr. Pengcheng LIU, Jiangsu Institute of Urban & Rural Planning and Design, China* 17:35 – 17:55: Exploring Spatial Hierarchy from Semantic Space of POI with VGI Data *by Ms. Xiaolin ZHOU, The Hong Kong Polytechnic University, HK*	Z204
18:30 - 21:00	*Conference Banquet @ King Yat Hin, Level 8, Harbour Plaza Metropolis Hotel,7 Metropolis Drive, Hung Hom*	

25 June 2019 (Tue) AM		
9:00 - 9:30	**Keynote Speech 5**: Enhancing Urban Mobility *Prof. Michael GOODCHILD, Emeritus Professor of Geography, University of California, Santa Barbara, US*	Z207
9:30 - 10:00	**Keynote Speech 6**: Transport GIS for Future Smart Cities *Prof. Anthony YEH, Academician of the Chinese Academy of Sciences; Chan To Haan Professor in Urban Planning and Design and Chair Professor of the Department of Urban Planning and Design, The University of Hong Kong, Hong Kong*	
10:00 - 10:30	**Keynote Speech 7**: Smart Cities and New Urban Science *Prof. Renzhong GUO, Academician of Chinese Academy of Engineering; Dean of Research Institute for Smart Cities, Shenzhen University, China*	
10:30 - 10:45	*Coffee Break*	
10:45 - 12:00 (Parallel Sessions)	**5.2) Smart Cities and Urban Science II** 10:45 – 11:05: Follow The Law of Nature: Understanding Smart City *by Prof. Lixin WU, Central South University, China* 11:05 – 11:25: Let's Talk About Digital Twins and Future Cities *by Dr. Gerhard SCHROTTER, City of Zurich/ Public Administration, Switzerland* 11:25 – 11:45: Take a Look Around: Geographic Knowledge Discovery for the Case Study of London Streetviews *by Dr. Stephen LAW, The Alan Turing Institute and University College, UK*	Z207
	7) Smart Mobility 10:45 – 11:05: Flow Patterns Indoor and Their Reasons both for Group and for Individual: Inferences from Positioning Data *by Prof. Tao PEI, Institute of Geographic Sciences and Natural Resources Research, China* 11:05 – 11:25: Unravel the Landscape and Pulses of Cycling Activities from a Dockless Bike-sharing System *by Dr. Yang XU, The Hong Kong Polytechnic University, HK* 11:25 – 11:45: A Novel Map Matching Algorithm for Low Sampling Rate Trajectory Data with the Hidden Markov Model *by Mr. Yigong HU, Wuhan University, China* 11:45 – 12:05: A Review of the Application of Data-Driven Human Mobility Research in Smart City Development *by Dr. Anqi WANG, The Hong Kong Polytechnic University, HK*	Z206
	8) Housing 10:45 – 11:05: The Spatio-Temporal Accessibility of Comprehensive Service Facilities of Residential Areas Based on Internet Map *by Dr. Xinxin ZHOU, Nanjing Normal University, China* 11:05 – 11:25: Developing Multi-Detail Residential Building Typologies. A Case Study in Ningbo *by Ms. Polina TROFIMOVA, University of Nottingham (Ningbo), China* 11:25 – 11:45: Impact of The Hong Kong-Zhuhai-Macao Bridge on Second-hand Housing Prices in Zhuhai *by Mr. Nianhua LIU, Sun Yat-Sen University, China* 11:45 – 12:05: Development of Land Valuation Model for Mass Appraisal: A Case Study in Baybay City, Philippines *by Mrs. Jannet BENCURE, Asian Institute of Technology, Thailand*	Z208
	9.1) Spatial Data Infrastructure (SDI) I 10:45 – 11:05: Large Scale Underground Utility Mapping Using Mobile Ground Penetrating Radar: A Case Study in Singapore *by Dr Siow Wei JAW, Singapore-ETH Centre, Singapore* 11:05 – 11:25: Development of Spatial Big Data Analysis Platform for Smart City in Korea *by Dr. Soohyun KIM, Yonsei University, Republic of Korea* 11:25 – 11:45: Research on 3D Scene Modeling Method of Residential Area Based on Construction Drawing *by Mr. Pengxiang WANG, Nanjing Normal University, China*	Z204
12:15 - 14:00	*Lunch @ Chinese Restaurant, 4/F, Communal Building*	

25 June 2019 (Tue) PM		
25 June (Tue) 14:00 - 15:50 (Parallel Sessions)	**10.1) Urban Remote Sensing I** 14:00 – 14:20: Sub-Canopy Topography Estimation from Polinsar Data with Complex Adjustment Method *by Prof. Jianjun ZHU, Central South University, China* 14:20 – 14:40: Remotely Sensed Imagery Classification Using a Spatially Constrained Fuzzy C-means Clustering Algorithm *by Prof. Hua Zhang, China University of Mining and Technology, China* 14:40 – 15:10: Potentiality of Using Luojia 1-01 Nighttime Light Imagery to Estimate Urban Community Housing Price *by Dr. Chang LI, Central China Normal University, China* 15:10 – 15:30: Elevation Data Generation from Earth Observations for Urban Morphology Classification *by Dr. Lei ZHANG, The Hong Kong Polytechnic Univserity, HK* 15:30 – 15:50: Fast Topographical Mapping at 1:500 Scale in Mountain Cities Using UAV-Based Oblique Photogrammetry and Laser Point Cloud *by Mr. Yuqi HE, Chongqing Survey Institute, China*	Z207
	11) A.I. & Urban Model I 14:00 – 14:20: Apply Computer Vision and Machine Learning to Measures Human Perception of Street Design Quality *by Ms. Ruijun LIU, Harvard University, US* 14:20 – 14:40: A New Landslide Detection Approach Based on Deep Convolutional Neural Network *by Dr. Min ZHANG, The Hong Kong Polytechnic University, HK* 14:40 – 15:10: UrbanAI - Developing Machine Learning Approaches and Interfaces to Support the Planning and Delivery of Transport and Housing in Sydney *by Mr. Oliver LOCK, UNSW Sydney, Australia* 15:10 – 15:30: Multi-Scenarios Simulation of Urban Land-use Change in Shanghai Based on Random Forest and CA-Markov Model *by Ms. Xuewei DANG, Lanzhou Jiaotong University, China* 15:30 – 15:50: Prognosis for Location for Affordable Housing for Pune Using Artificial Neural Network *by Mr. Harshil Panka MUTHA, Pandit Deendayal Petroleum University, China*	Z206
	13) Transport and Urban Ecology 14:00 – 14:20: Zero Emission Mobility Campus *by Ms. Rebecca HECKMANN, University of Applied Sciences, Stuttgart, Germany* 14:40 – 15:10: Understanding The Interplay Patterns Between Bus, Metro and Taxi Before and After the Chinese Spring Festival *by Mr. Jianwei HUANG, The Hong Kong Polytechnic University, HK* 15:10 – 15:30: Unraveling the Disparity of Service Accessibility through Commuter-based Two-step Floating Catchment Area Method Using Cellphone Big Data *by Mr. Zifeng CHEN, The University of Hong Kong, HK*	Z208
	9.2) Spatial Data Infrastructure (SDI) II 14:00 – 14:20: Spatial-temporal Evolution and Completeness Analysis of OpenStreetMap Building Data in China from 2012 to 2017 *by Dr. Qi ZHOU, China University of Geosciences, China* 14:20 – 14:40: Temporal and Spatial Pattern Evolution of Nanjing Urban Water System in the Near Hundred Years Under the Framework of Time and Space *by Ms. Wanrong JIN, Nanjing Normal University, China* 14:40 – 15:00: Topological Modelling for Multidimensional Cadastral Objects Based on Ordered Topological Model *by Dr. Yuan DING, Hohai University, China*	Z204
15:50 - 16:05	*Coffee Break*	

25 June (Tue) 16:05 - 18:05 (Parallel Sessions)	**10.2) Urban Remote Sensing II** 16:05 – 16:25: Clustering Based OCC with Auxiliary Social Media to Classify Impervious Surface Area from SAR Data *by Dr. Zelang MIAO, Central South University, China* 16:25 – 16:45: Improve Satellite Image Quality to Support Urban Studies *by Dr. Xiaolin ZHU, The Hong Kong Polytechnic University Kung University, HK* 16:45 – 17:05: Classification of Hyperspectral Data from Urban Areas Based on Weighted Logistic Metric Learning *by Dr. Yanni DONG, The Hong Kong Polytechnic University, HK* 17:05 – 17:25: Utilization of Remote Sensing and Social Sensing Data for Land Use Classification *by Ms. Adillah ALFATINAH, National Cheng Kung University, Taiwan* 17:25 – 17:45: Super-Resolution Research on Remote Sensing Images in the Megacity Based on Improved SRGAN *by Mr. Zhipeng LI, Shanghai Institute of Surveying and Mapping, China* 17:45 – 18:05: A Semi-Interactive Indoor 3D Reconstruction Method Based on Image Partition *by Mr. Niaotao LIU, Nanjing Normal University, China*	Z207
	12) A.I. & Urban Model II 16:05 – 16:25: How Similar or Different Are Streets Among Cities? Urban Street Network Analysis Using Graph Convolutional Neural Network *by Dr. Ding MA, University of Gavle, Sweden* 16:25 – 16:45: Spatio-Temporal Modeling Between Nighttime Light Intensity and GDP for Wuhan Metropolitan Area *by Dr. Chang LI, Central China Normal University, China* 16:45 – 17:05: Regional Scene Risk Analysis Based on Convolutional Neural Networks and Decision Tree *by Mr. Zhipeng XIONG, Wuhan University, China* 17:05 – 17:25: Computing Sequential Experiences of an Urban Street Using Deep Learning Technique *by Dr. Perry P J Yang, Georgia Institute of Technology, USA*	Z206
	14) Urban Positioning 16:05 – 16:25: Applications of Low Cost RGB-D Sensor for SLAM *by Prof. Wu CHEN, The Hong Kong Polytechnic University, HK* 16:25 – 16:45: Improved Robust Kalman Filter in GPS/UWB/MEMS-IMU Tightly Coupled Navigation and Indoor Positioning *by Prof. Zengke LI, China University of Mining and Technology, China* 16:45 – 17:05: Optimization Estimation of Indoor Motion Trajectory of RGB-D Camera Based on Depth Calibration *by Ms. Xuan LIAO, Wuhan University, China* 17:05 – 17:25: Sensing Traffic Congestion at the Turn Level from Taxis' GPS Trajectory Data *by Ms. Zihan KAN, Wuhan University, China*	Z208
	15) Human Health and Well-being 16:05 – 16:25: Identification of Typical Annual and Diurnal Patterns for Clear-Sky Climatology of Surface Urban Heat Island *by Dr. Zihan LIU, Nanjing University, China* 16:25 – 16:45: Spatio-Temporal Pattern Analysis of Ambulance Demand in Tokyo via the Bayesian Approach *by Mr. Tianqi XIA, The University of Tokyo, Japan* 16:45 – 17:05: A New Evaluation Approach to The Impact of Rising Density on the Pattern of Urban Open Space *by Ms. Wei SHI, The University of Hong Kong, HK* 17:05 – 17:25: Analysis of Spatial Disparities in Health Care Accessibility: The Comparison Between the Central Part of Two Typical Cities in China *by Ms. Meijie CHEN, Wuhan University, China* 17:25 – 17:45: Environment and Perceived Restorativeness: A Comparative Study Between Urban Cemeteries and Parks Among Users with Different Mental Conditions in Edinburgh *by Ms. Ka Yan LAI, The University of Hong Kong, HK* 17:45 – 18:05: Mapping of Health Risk as Air Pollution Used by Open Source Software *by Ms. Uyanga ANKHBAYAR, Land Administration Department of Capital City, Mongolia*	Z204

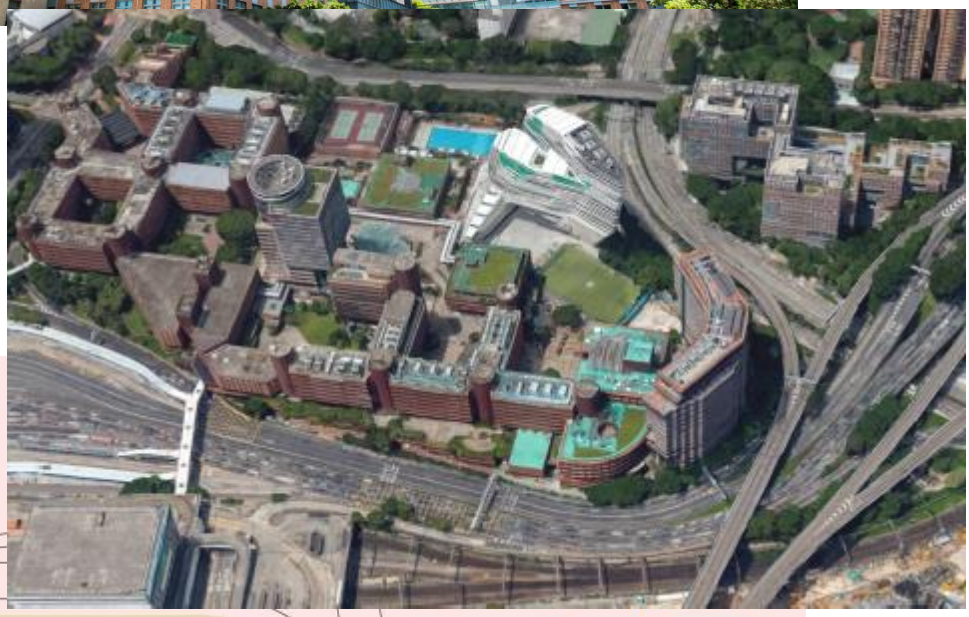
26 June 2019 (Wed) AM		
9:00 - 9:30	**Keynote Speech 8**: Some Thoughts on Undergraduate Education & Research in Urban Informatics *Prof. Qingquan LI, President, Shenzhen University, China*	
9:30 - 10:00	**Keynote Speech 9**: Towards Urban Informatics *Prof. John SHI, Director of Laboratory for Smart City and Spatial Big Data Analytics; Otto Poon Charitable Foundation Professor in Urban Informatics; Head & Chair Professor of LSGI, PolyU*	Z207
10:00 – 11:20 (Parallel Sessions)	10:00 – 10:30 **Dialogue with International Journal Editors**	
	16.1) Urban Technologies and Principles I 10:35 – 10:55: Zero Velocity Interval Detection based on CHMM in Micro Inertial Pedestrian Navigation *by Prof. Wei SUN, Liaoning Technical University, China* 10:55 – 11:15: Urban Multi-Source POI Data Fusion by Controlling the Uncertainty of Location and Attribute *by Dr. Chang LI, Central China Normal University, China* 11:15 – 11:35: Multi-Scale Evaluation of Factors of Coastline Change in Hainan Island based on the Improved Weighted Apriori Algorithm *by Mrs. Xin WANG, Wuhan University, China* 11:35 – 11:55: Spatiotemporal Visualization Method of Road Waterlogging for Urban Flood Warning *by Mr. Kaiyue ZANG, Nanjing Normal University, China*	Z207
	16.2) Urban Technologies and Principles II 10:00 – 10:20: A Systematic Tracing of Temporal and Spatial Boundaries of Places with High Concentration of Human Activity to Identify Popular Non-Work Destinations *by Prof. Roberto Ponce LOPEZ, Tecnologico de Monterrey, Mexico* 10:20 – 10:40: Exploring the Evolution of Urban Road Networks from Fractal Perspectives *by Dr. Hong ZHANG, Southwest Jiaotong University, China* 10:40 – 11:00: HoloCity - Visual Analytics of Real-Time and Massive Passively-Collected Spatiotemporal Urban Sensor Data in Augmented Reality *by Mr. Oliver LOCK, UNSW, Australia*	Z208
	17) Urban Big Data and Cloud Computing 10:00 – 10:20: Multi-Source Big Data Based Spatial Analysis on Cultural and Tourist Influence of Wuhan City, China *by Prof. Qingming ZHAN, Wuhan University, China* 10:20 – 10:40: SigSTMiner: Mining Interesting and Significant Sequential Patterns from Semantic Trajectories *by Dr. Anshu ZHANG, The Hong Kong Polytechnic University, HK* 10:40 – 11:00: Using Data Mining Methods to Explore the Spatial and Temporal Dynamics of Perceived Service Quality of Metro Systems: Evidence from Shenzhen *by Ms. Shuli LUO, The Chinese University of Hong Kong, HK*	Z206
	10.3) Urban Remote Sensing III 10:00 – 10:20: Remote Sensing Evaluation of Total Suspended Solids Dynamic under River Chief System of China: A Case Study of Drinking Water Sources Heidi Reservoir in Zhanjiang of Western Guangdong *by Prof. Shuisen CHEN, Guangzhou Institute of Geography, China* 10:20 – 10:40: Linear Spectral Mixture Analysis (LSMA) for Sub-Pixel Built-up Area (BUA) Fraction Estimation Based on MODIS and DMSP-OLS Data *by Ms. Xue WANG, The Chinese University of Hong Kong, HK* 10:40 – 11:00: Urban Construction Land Classification Based on POIs Area Weighted Kernel Density Similarity Model *by Mr. Zhaotong CHEN, Wuhan University, China* 11:00 – 11:20: A Method for Extracting Building Area from Photogrammetric DSM by Automatic Selecting Samples Using Historical DLG Data *by Dr. Yunsheng ZHANG, Central South University, China*	Z204
11:20 ~	*Coffee Break*	

26 June (Wed) 11:35 - 13:35 (Parallel Sessions)	**16.3) Urban Technologies and Principles III** 11:55 – 12:15: Spatial Context-based Local Toponym Extraction and Address Segmentation from Urban Point-of-Interests Data *by Dr. Xi KUAI, Shenzhen University, China* 12:15 – 12:35: Automatic Localizing and Controlling the Elevator Button Allowing Service Robot Moving Among the Floors *by Mr. Shenlu JIANG, The Hong Kong Polytechnic University, HK* 12:35 – 12:55: A 4D Spatio-Temporal Approach to Modelling Land Value Uplift from Rapid Transit in High Density and Topographically-Rich Cities *by Dr. Christopher Donald HIGGINS, The Hong Kong Polytechnic University, HK*	Z208
	18) Pollution 11:35 – 11:55: Spatio-Temporal Profiling of $PM_{2.5}$ Distribution through the Integration of Observations Collected by Mobile Sensors and Ground-Based Stations *by Prof. Yee LEUNG, The Chinese University of Hong Kong, HK* 11:55 – 12:15: Under the Dome: a 3D Urban Texture Model and its Relationship with Urban Land Surface Temperature *by Prof. Qingfeng GUAN, China University of Geoscience, China* 12:15 – 12:35: Solar Capacity of Three-Dimensional Cities *by Dr. Rui ZHU, Singapore-MIT Alliance for Research and Technology (SMART), Singapore* 12:35 – 12:55: A Multi-Scale, Web-Based Interface for Strategic Planning of Low-Carbon City Quarters *by Ms. Alexandra MITTELSTAEDT, University of Applied Sciences, Stuttgart, Germany* 12:55 – 13:15: A Machine Learning Approach to Model Spatial Variations of Daily Fine Particulate Matter ($PM_{2.5}$) and Nitrogen Dioxide (NO_2) Concentrations in Shanghai, China *by Dr. Chao LIU, Tongji University, China* 13:15 – 13:35: Distribution of Air Pollution Risks from Vehicle Emission Based on High Spatio-Temporal Resolution TCI Shanghai under ANSYS Simulation *by Dr. Jiantian BU, Tongji University, China*	Z206
	19) Urban Risks and Resilience 11:35 – 11:55: Surface Deformation Monitoring of the Pearl River Delta Using TM-InSAR *by Prof. Guangcai FENG, Central South University, China* 11:55 – 12:15: An Integration of Seismic Deformation into WebGIS for Real-time Disaster Evaluation and Emergency Response *by Mr. Zhao RUI, The Hong Kong Polytechnic University, HK* 12:15 – 12:35: City's Bearing Capacity of Bottled Gas Supply Station *by Ms. Xin TAN, Wuhan University, China* 12:35 – 12:55: Online Decision-Support Infrastructure for the Integration of Spatial Planning and Flood Risk Management Policies *by Dr. Jing RAN, Hunan University, China* 12:55 – 13:15: Dynamic Estimation of Emergency Supplies Demand For Urban Flood Disaster Using Baidu Heat Map *by Ms. Anqi LIN, Central China Normal University, China*	Z204
13:35 – 14:00	*Light lunch @ 2/F, Block Z*	
14:00 – 14:30	**Awards Presentation & Closing**	Z207
15:00 – 18:30	Social Event to the Peak (register by 14:00, 24 June at registration counter) *Gather at 14:45 @ outside Z207* *Coach returns at 18:30 (Arrived PolyU at around 19:15)*	

More information: https://www.polyu.edu.hk/lsgi/icui2019/programme

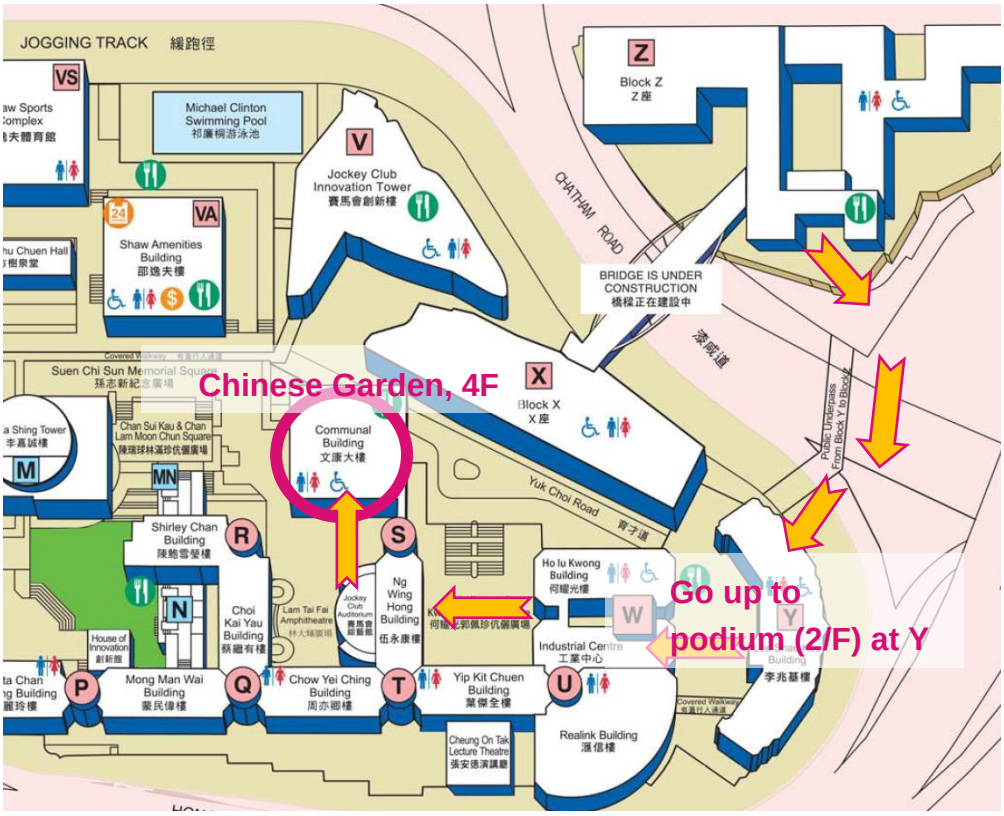
Location of the Conference Venue

- 24-26 Jun 2019 (Mon – Wed) 2/F, Block Z, The Hong Kong Polytechnic University



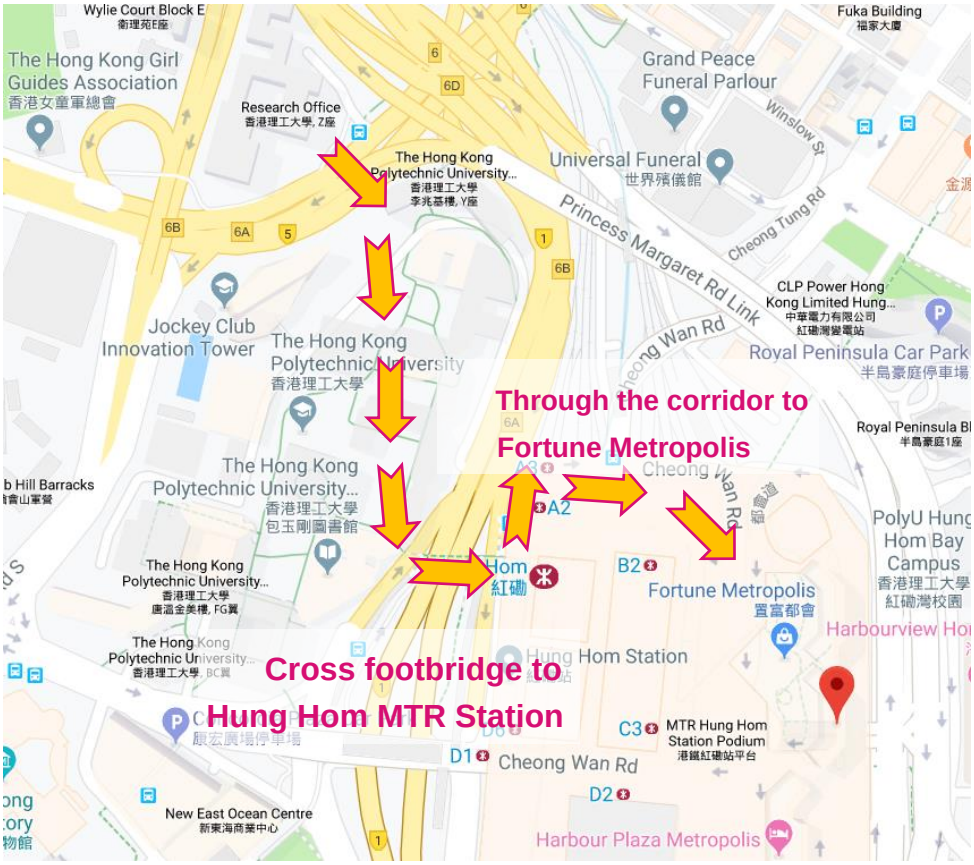
Venue for Lunch on 24 & 25 June 2019

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



Venue for Conference Banquet on 24 June 2019 (Mon)

- King Yat Hin, Level 8, Harbour Plaza Metropolis Hotel,7 Metropolis Drive, Hung Hom



Information of Social Event (The Peak) on 26 June 2019 (Wed)

Gathering Time: 14:45, 26 June 2019

Gathering Venue: outside Z207

Return Time: 18:30 (arrive PolyU at around 19:15)

Registration is required. Please register at the conference registration counter before 14:00, 24 June.

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, 24 Jun 2019 8:00 – 11:30 am

Presentation Tips

Each presentation should be ***within 15 minutes*** including preparation and presentation, reminder will be given in last 5 minutes. A short Q&A will be followed (if any).

- Please note that there will be video recording for all presentations in ICUI 2019.
- You can typically present about 15-20 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 10 minutes before the start of your session to ask conference staff to assist you before your scheduled presentation.
- At the closing of the conference (26 June), our Conference Chair will present the Best Paper and Best Presentation Awards.

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.
- Please introduce each presentation and hold Q&A part after each presentation. Due to limited time, **at most 2 questions** should be accepted after each presentation.
- Total time for presentation and Q&A for each presenter should be within 20 minutes. Please help to control the time. A helper in the room will assist you to monitor the time of the presentations.
- Speakers should arrive 10 minutes before the session starts. If any speaker doesn't arrive before the session, please let our staff know.

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, Shenzhen Bay (6:30-24:00), Lok Ma Chau Checkpoint (24 hours), and Lo Wu Checkpoint (6:30-24:00).

- From ShenZhen Airport: take a taxi to Lok Ma Chau Checkpoint/ Lo Wu Checkpoint, then take MTR East Rail Line to Hung Hom Station.
- From ShenZhen Railway Station at Lo Wu: Directly go through the Lo Wu 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 / email: icui.2019@polyu.edu.hk

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 Yuen6 Building
Tel: 2766-5433

Thank you for your support to ICUI 2019!