



2019 ICGIS Program

Time	Contents
13:00~13:30	Registration 등록
13:30~13:35	Opening Remarks 개회사 President of KRIHS 국토연구원장
13:35~13:40	Congratulatory Address 축사 Deputy Minister of House and Land Office, MOLIT 국토교통부 주택토지실장
13:40~14:20	Keynote Speech 기조연설
13:40~14:20	Senseable Cities 센서블 시티 Prof. Carlo Ratti, Senseable City Lab, MIT
14:20~14:40	Coffee break 휴식
14:40~16:40	Invited Talk 발표세션
14:40~15:10	Smart Partnerships 스마트 파트너십 Prof. Debra Lam, Georgia Institute of Technology
15:10~15:40	How Big Data Can Meaningfully Support Urban Design and Planning 빅데이터를 활용한 도시 디자인과 계획 Prof. Bige Tunçer, Singapore University of Technology and Design
15:40~16:00	Understanding Tourists' Image of Seoul with Geotagged Photos using Convolutional Neural Networks CNN딥러닝을 이용한 외국인 관광객의 서울 이미지 분석 Prof. Youngok Kang, Ewha Womans University 이화여자대학교 강영옥 교수
16:00~16:20	Use Cases of Geospatial Information in AI Applications 인공지능 응용에서의 공간정보 활용 사례 Prof. Hyeonkyu Lee, KAIST 한국과학기술원 이현규 교수
16:20~16:40	Monitoring Land Use and Land Cover Change using Geospatial A.I. 인공지능 기술을 활용한 국토모니터링 혁신 방안 Dr. Ki-Hwan Seo, KRIHS 국토연구원 서기환 연구위원
16:40~17:00	Coffee break 휴식
17:00~18:00	Panel Discussion 종합토론
	Moderator 좌장 Dr. Hosang Sakong, KRIHS 국토연구원 사공호상 선임연구위원
17:00~18:00	Panels 토론자 Prof. Do-Nyun Kim, Sungkyunkwan University 성균관대학교 김도년 교수 Prof. Kyoung Jun Lee, Kyung Hee University 경희대학교 이경전 교수 Dr. Seungbum Kim, VW LAB 브이더블유랩 김승범 소장 Dong Min Han, MOLIT 국토교통부 국토정보정책과 한동민 과장 Bo-Gyeong Mun, The Electronic Times 전자신문 문보경 차장



Spatially Enabled Society with AI and Digital Twin

인공지능과 디지털트윈으로 여는 공간정보사회

2019. 8. 8. (목), 13:00~18:00
코엑스 컨퍼런스룸 317호

Spatially Enabled Society with AI and Digital Twin

인공지능과 디지털트윈으로 여는 공간정보사회

Keynote Speaker



Prof. Carlo Ratti | 카를로 라띠

Director, Senseable City Lab, MIT

Dr. Carlo Ratti is an architect and engineer who teaches at MIT, directing the Senseable City Lab, and is a founding partner of the international design office 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 Council on Cities and Urbanization, and as special advisor on Urban Innovation to the European Commission.

엔지니어이자 건축가인 MIT 센서블시티랩 소장 카를로 라띠는 디지털 기술에 대한 특별한 관심을 갖고 미래적인 건축과 공간 디자인에 관한 연구를 수행하고 있다. 그의 선구적인 연구 결과물은 유수의 디자인상 수상과 더불어 (타임)지 '올해 최고의 발명'으로 그의 프로젝트가 두 차례나 오르는 등 전 세계의 주목을 받고 있다.

KEYNOTE SENSEABLE CITIES

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.

Invited Speakers



Prof. Debra Lam | 데브라 램 교수

Managing Director, Smart Cities & Inclusive Innovation
Georgia Institute of Technology

Dr. Debra Lam is the Managing Director of Smart Cities and Inclusive innovation for Georgia Tech, and has a mandate to drive smart communities and urban innovation work across the university and beyond. She founded the Georgia Smart Community Challenge, the first state-wide effort in the nation that empowers communities of all sizes to become smarter. Prior to this, she served as Pittsburgh's first ever Chief of Innovation & Performance where she oversaw all technology, sustainability, performance and innovation functions of city government. She crafted the city's first strategic plan for innovation, Inclusive Innovation Roadmap. Prior to that, she was a management consultant at a global engineering and design firm, Arup. She has been the recipient of various awards, including one of the top 100 most influential people in digital government by Apolitical. She has worked and lived in the United Kingdom, China, Taiwan, and Hong Kong. She is a graduate of Georgetown University and University of California, Berkeley, and serves on the boards of the MetroLab Network and Neighborhood Nexus.

Prof. Bige Tunçer | 비기 툄너 교수

Singapore University of Technology and Design

Dr. Bige Tunçer is an associate professor at Singapore University of Technology and Design. She leads the Informed Design Group, which focuses on data collection, information and knowledge modeling and visualization, for informed architectural and urban design. She currently leads a large multi-disciplinary project, investigating multi-modal data collection on user and usage information of public spaces in residential new towns, and develops a design system for the adaptive redesign of such spaces.

Prof. Youngok Kang | 강영옥 교수

Ewha Womans University 이화여자대학교

Dr. Youngok Kang is a professor of social studies education and GIS convergence track at Ewha Womans University. From 2013 to 2014, she served as chairman of the Korean Cartographic Association and is currently chairman of Korean Society for Geospatial Information Science. Her research areas are GIS, spatial data analysis and social big data analysis. Her recent research interest is in spatio-temporal big data analysis using deep learning technology.

Prof. Hyeonkyu Lee | 이현규 교수

KAIST 한국과학기술원

Dr. Hyeonkyu Lee is a professor of Smart Energy AI Research Center, KAIST. He has been a CTO/COO of AI Research Institute (2016), a Sr. VP of KT (2011), a Director of NHN (2007), and a CEO of iCross Technology (2003). He received an "Award of Innovation in Geographical Information" from the President (2010), and an "Award of Technological Innovation in Home Networks" from the Prime Minister (2005). He developed a Korean Word-Processor having hand-writing recognition, a system for deciding route of night-time bus in Seoul, a navigation system considering of weather conditions, and a system for detecting potential fake-phones. His research interests include gesture recognition, machine learning, and predictive maintenance.

Dr. Ki-Hwan Seo | 서기환 연구위원

Research Fellow, KRIHS 국토연구원

Dr. Ki-Hwan Seo is a research fellow at Korea Research Institute for Human Settlements (KRIHS). His research interest is in GIS, Remote Sensing, spatial data analysis, transportation geography, and National Spatial Data Infrastructure. He has been studying on wide variety of policies and strategies in terms of national spatial data infrastructure to support Korean government since 2003. His recent research interest is in Geospatial Artificial Intelligence for monitoring and managing urban and rural areas including North Korea.

Panels



Dr. Hosang Sakong | 사공호상 선임연구위원

Senior Research Fellow, KRIHS 국토연구원

Dr. Sakong Hosang is a policy designer in the National Spatial Data Infrastructure (NSDI). He has diverse careers in the research fields such as land policy, urban planning, geospatial information and global development partnership in the KRIHS over the last 30 years.

Moderator



Prof. Do-Nyun Kim | 김도년 교수

Sungkyunkwan University 성균관대학교

Dr. Do-Nyun Kim is a Professor of Urban Design at SungKyunkwan University (SKKU). He is the Director of Smart Green City Lab, designated as a smart city hub of UN-habitat Partner University Initiative(UNI). He has served as a Commissioner of the Presidential Commission on Architecture Policy to the President of Korea. He has designed and consulted Irkutsk Baikol Smart City in Russia, Da-nang Comprehensive Plan in Vietnam, and Sang-Am Digital Media City in Seoul (DMC). He is currently designing a smart urban regeneration in Yong-San(Y-Valley) as a chief coordinator to restore urban industrial ecosystem, including Youth Start-up Center.

Panel



Prof. Kyoung Jun Lee | 이경전 교수

Kyung Hee University 경희대학교

Dr. Kyoung Jun Lee is a professor of Information Systems at the Business School at Kyung Hee University in Seoul, South Korea. He is currently the Director of the International Center for Electronic Commerce (<http://icec.net>) and Humanitas Big Data Research Center. He founded Benple Inc., IoT & AI-based company, and Allwinware Inc. He is the current president of Korean Association for Business Communication (2019-2020).

Panel



Dr. Seungbum Kim | 김승범 소장

Director, VW LAB 바이더블유랩

Dr. Seungbum Kim is a director of VW LAB in Seoul. He explores human desire and behaviors by analyzing and visualizing spatial data. He manages large data such as floating population or complex mobility network, and translates them into real-time interactive visualization. In 2016, as one of the curators of the Korean Pavilion, he participated in the Venice Biennale exhibition work.

Panel



Dong Min Han | 한동민 과장

Director, NSIPD MOLIT 국토교통부 국토정보정책과

Dong Min Han is the director of National Spatial Information Policy Division (NSIPD) at the Ministry of Land, Infrastructure and Transport (MOLIT). He has served MOLIT as an administrator since 1993 in the filed of land policy, housing policy, railway safety policy, etc. He is currently leading the national policy for spatial information to more systematic, integrated, public and user-friendly direction.

Panel



Bo-Gyeong Mun | 문보경 차장

Senior Reporter, The Electronic Times 전자신문

Bo-Gyeong Mun is a senior reporter of The Electronic Times. She specializes in the government policy in the area of digital infrastructure and transportation. She is also the author of several books related with the industrial transformation according to technology development of devices and softwares.

Panel