



Open data and Artificial Intelligence for Urban Proximity

in Conjunction with FOSS4G-ASIA 2023

This session will be the place to discuss, learn and experience the future direction of urban proximity monitoring and measurement for inclusive and walkable city planning through the sharing of policies, case projects and workshops on open data, big data, and Artificial intelligence (AI) in the city. Urban Proximity seminar will be organized as a UN-Habitat Urban Thinkers Campus(UTC) event and streamed through Seoul Metropolitan Government, Korea Planning Association and GIS World's YouTube channel

Organizer



Media Channel

Homepage: <https://foss4g.asia/2023/un-habitat-utc/>

Youtube: (Korean) Seoul Metropolitan Government, <https://www.youtube.com/@seoulive>

Korea Planning Association DOSI TV, https://www.youtube.com/@tv_7559

(English) GIS World Channel, https://www.youtube.com/@GIS_World_de

Date / Venue

Workshop: December 1st, 2023, 09:30 p.m. (KST) / Circle Room, Seoul Citizens Hall

Seminar: December 1st, 2023, 13:00 p.m. (KST) / Vium Hall, Seoul Hall of Urbanism and Architecture

Participants

Kore Planning Association (KPA), Seoul Institute, CHAIRE-ETI, experts from urban planning and urban information systems

Seminar

- **Soumaya Ben Dhaou**, Responsible AI for Cities, E-governance unit of United Nations University, Guimarães, Portugal
- **Kyoungsook Kim**, AI powered Geospatial Platform, Artificial Intelligence Research Center, Japan
- **Gunho Sohn**, Robot-Human Dynamics on Urban Sidewalks: Simulating Safe Coexistence through GIS-Based Digital Twinning, Toronto, Canada
- **Junyoung Choi, Soo Beom Choi, Junghun Lee, Hansol Choi**, Neighborhood planning support using big data and AI, The Seoul Institute, Seoul, Korea
- **Catherine Gall**, Unpacking the 15-minute City Model, CHAIRE ETI, Paris, France

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Discussion on the future direction of the utilization of big data and AI for urban proximity

- **Bongmoon Choi**, vice president of KPA (Facilitator)
- **Taehyun Kim**, The Seoul Institute
- **Seunghoon Han**, CHAIRE ETI
- **Nakyung Kang**, KPA Student Reporter, Ewha Womans University
- **Junyoung Choi**, The Seoul Institute & Chair of Big Data Research Committee, KPA

Workshop, Urbanity: A Global Tool for Open Urban Network Analysis

City planning is a hard task given the scale and complexity of urban systems. Urban planners need better tools to help them understand and contextualise large urban systems. To address this concern, we introduce Urbanity, an open global tool that provides planners a seamless interface to generate city-scale representation of urban networks and their contextual features. Urbanity is developed with Python and built entirely on open source software and open data. The tool has been applied and tested at a global scale and demonstrates the powers and promises of urban analytics across any geographical location and scale. The proposed workshop session will include: 1) a presentation on Urbanity, 2) demonstration of its key functionalities, and 3) a step-by-step code along session to use Urbanity in urban science workflows. Urbanity plays an important role in helping urban planners and policymakers to make sense of the big data that is emerging from cities.

- Organizer: **Winston Yap** is PhD candidate at the Urban Analytics Lab, National University of Singapore.
- What is Urbanity: Urbanity is a Python software. Participants should come with basic knowledge of Python to ensure meaningful participation. Organizer will go through installation instructions but will not cover the fundamentals of Python.

Programme

Friday, 1 Dec 2023

09:30 – 11:30 **Workshop, Urbanity: A Global Tool for Open Urban Network Analysis (Organizer: Winton Yap) Dongeurami room, Seoul Citizen Hall**

11:30 – 13:00 **Lunch**

13:00 – 15:00 **Urban Thinkers Campus: Open Data and Artificial Intelligence for Urban Proximity (Moderator: Junyoung Choi)**

13:00 – 13:05 Introduction of Session

13:05 – 13:10 **Opening Remarks**
Hyungsoo Park, President of the Seoul Institute
Chanho Kim, President of the Korea Planning Association

Group photo with speakers, KPA student reporters and invited student participants

13:10 – 14:25

- (20') **Soumaya Ben Dhau**, Responsible AI for Cities, E-governance unit of United Nations University, Guimarães, Portugal
- (20') **Kyoungsook Kim**, AI powered Geospatial Platform, Artificial Intelligence Research Center, Japan
- (15') **Gunho Sohn**, Robot-Human Dynamics on Urban Sidewalks: Simulating Safe Coexistence through GIS-Based Digital Twinning, Toronto, Canada
- (10') **Junyoung Choi, Soo Beom Choi, Junghun Lee, Hansol Choi**, Neighborhood planning support using big data and AI, The Seoul Institute, Seoul, Korea
- (20') **Catherine Gall**, Unpacking the 15-minute City Model, Chaire-ETI, Paris France

14:25 – 14:55 **Discussion (Chair: Bongmoon Choi, vice president of KPA)**

- Taehyun Kim, The Seoul Institute
- Seunghoon Han, CHAIRE ETI
- Nakyung Kang, KPA Student Reporter, Ewha Womans University
- Junyoung Choi, The Seoul Institute & Chair of Big Data Research Committee, KPA

14:55 – 15:00 **Closing Remarks**

Contact

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