

Juhyeon Park

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RESEARCH INTERESTS	Urban Analytics; Urban Sensing Technologies; Geospatial Big Data Analytics; Human Mobility; Data Mining/Visualization; Smart Cities	
EDUCATION	Ulsan National Institute of Science and Technology (UNIST), Ulsan, Republic of Korea	
	■ Ph.D. in Urban and Environmental Engineering • Dissertation Measuring Public Life Through Digital Technologies: Investigating the Use of WiFi Sensing for Enhancing Public Space • Advisor: Professor Jeongseob Kim	2022
	■ B.S. in Urban and Environmental Engineering	2015
ACADEMIC & PROFESSIONAL EXPERIENCE	■ Associate Research Fellow , Big Data Analytics Team, Housing & Urban Finance Research Institute, HUG	2025-present
	■ Associate Research Fellow , Big Data Analytics Team, Housing & Urban Finance Research Institute	2024-2025
	■ Associate Research Fellow , Department of Future Strategies Research, Gyeongbuk Development Institute	2023-2024
	■ Postdoctoral Fellow , Department of Urban and Environmental Engineering, Ulsan National Institute of Science and Technology	2022-2023
PUBLICATION	<p>Park, J., & Kim, J. (2019). Economic impacts of a linear urban park on local businesses: The case of Gyeongui Line Forest Park in Seoul. <i>Landscape and Urban Planning</i>, 181, 139-147.</p> <p>Park, J., & Kim, J. (2018). Defining heatwave thresholds using an inductive machine learning approach. <i>Plos one</i>, 13(11), e0206872.</p> <p>Yoon, D. K., Kang, J. E., & Park, J. (2017). Exploring environmental inequity in South Korea: An analysis of the distribution of toxic release inventory (TRI) facilities and toxic releases. <i>Sustainability</i>, 9(10), 1886.</p>	
GRANT AND AWARDS	■ Postdoctoral Fellowship , National Research Foundation of Korea (NRF) (\$45,000/year, period: 2 years)	2022
	■ First Prize , The 1st Big Data Competition for Commercial Area Analysis, Seoul Credit Guarantee Foundation	2017
	■ Excellence Award , The 5th Seoul Research Competition, Seoul Institute, Seoul Metropolitan Government	
	■ Excellence Award , The 4th Seoul Research Competition, Seoul Institute and Seoul. Metropolitan Government	2016

PATENTS	<p>Kim, J., & Park, J. (2020). <i>Pedestrian characteristic analysis system using WiFi sensing data and pedestrian characteristic analysis method using the same</i> (Korea Patent Application No.10-2020-0186549). Korean Intellectual Property Office</p> <p>Kim, J., Park, J., Choi, D., & Yoon, S. (2019). <i>Method and computer-readable recording medium for measuring survival rate and sales of commercial area</i> (Korea Patent No. 10-1990799). Korean Intellectual Property Office</p>
CONFERENCE PRESENTATION	<p>■ International Conference</p> <ul style="list-style-type: none"> ● Using WiFi sensing technologies to determine the pedestrians' behaviors and trajectories in urban public spaces, <i>WPCS-APSA Congress</i> 2022 ● Leveraging Online Review Data to Support Efficient Urban Park Planning and Management: A Multi-sensory Approach, <i>IAG'I International Symposium</i> ● Identifying and Measuring Staying Activities in Urban Public Space Through WiFi Sensing Technology, <i>Association of Collegiate Schools of Planning (ACSP) Conference</i> 2021 ● Evaluating the Use of WiFi Data For Understanding Pedestrian Behavior in Urban Public Space, <i>The 2nd ZHITU Symposium on Advances in Civil Engineering</i> ● Analysis of Human Mobility Patterns Using WiFi sensing Technology: A Case Study of a University Campus, <i>Association of Collegiate Schools of Planning (ACSP) Conference</i> 2020 ● Stationary Activity Mapping on a University Campus Using WiFi Sensing Technology, <i>Open Seminar at International Journal of Urban Sciences</i> ● Investigating Urban Pedestrian Mobility using Wi-Fi and Bluetooth Data: A Preliminary Study, <i>Association of Collegiate Schools of Planning (ACSP) Conference</i> 2019 ● Investigating Urban Pedestrian Mobility using Wi-Fi and Bluetooth Data: A Preliminary Study, <i>Asian Planning Schools Association (APSA) conference</i> ● Generating High-resolution Pedestrian Trajectories Based on Wi-Fi and Bluetooth Tracking in urban Outdoor Space: A Preliminary Analysis, <i>Transportation Research Board (TRB)</i> ● Retail and Residential Displacement by Environmental Gentrification, <i>Association of Collegiate Schools of Planning (ACSP) Conference</i> 2018 ● Exploring park-induced changes in retail business in gentrifying communities: The case of Gyeongui Line Forest Park, Seoul, Korea, <i>Urban Affairs Association (UAA) Conference</i>

RESEARCH & EDUCATIONAL EXPERIENCE

- Domestic Conference
 - Measuring Public Life Through Digital Technologies: 2022
Investigating the Use of WiFi Sensing for Enhancing Public Space, *Spring Congress of Urban Design Institute of Korea*
 - Measuring Public Life Through Digital Technologies: 2021
Investigating the Use of WiFi Sensing for Enhancing Public Space, *Spring Congress of Korea Planning Association*
 - Analysis of pedestrian behavior in urban public spaces using Wi-Fi sensing technology. *Fall Congress of Korea Planning Association*
 - Exploring pedestrian behavior in urban areas using Wi-Fi sensing technology, *Korea Association of Geographic Information Studies Conference*
 - Analysis of pedestrian movement trajectories using WiFi sensing technology in the case of a university campus, *Fall Congress of Korea Planning Association* 2020
 - Analysis of University student's behavior in a campus using WiFi sensing technology, *Spring Congress of Korea Planning Association*
 - Analysis of walking behavior and outdoor activities in urban public spaces Using WiFi sensing, *Korea Association of Geographic Information Studies Conference*
 - Analysis of pedestrian behavior using Wi-Fi and Bluetooth sensors, *Fall Congress of Korea Planning Association* 2019
- **Ulsan National Institute of Science and Technology (UNIST),**
Ulsan, Republic of Korea
- **Postdoctoral Fellow** in Urban and Environmental Engineering 2022 -
 - Development of Pedestrian Behavior and Spillover Effect Estimation Model Based on Smart Technology and Spatial Econometric Model: Focused on the Business Area Revitalization Project, National Research Foundation of Korea (NRF), PI: Juhyeon Park
 - Prediction of users' behaviors in commercial streets based on sensory perception of places and WiFi sensing, funded by National Research Foundation of Korea (NRF), PI: Professor Jeongseob Kim
- **Graduate Research Assistant** 2015-2022
 - Pedestrian volume modeling using a WiFi sensing system and three-dimensional measurements of street environment, funded by National Research Foundation of Korea (NRF), PI: Professor Jeongseob Kim
 - An agent-based simulation model of gentrification for Korean inner cities, funded by National Research Foundation of

Korea (NRF),

PI: Professor Jeongseob Kim

- Evaluation system of school zone safety using multi-agent VR simulator and deep learning, funded by Korea Agency for Infrastructure Technology Advancement (KAIA), PI: Professor Gi-Hyoug Cho

■ **Mentorship**

- Supervised 5 undergraduate students through the Undergraduate Interdisciplinary Research Project (UIRP) in 2020
- Supervised 3 high school students through the UNIST Lab Experience for Creative Achievements (ULECA) In 2017

**ADDITIONAL
SKILLS**

R, Python, MySQL, Stata, QGIS, ArcGIS

[Last update on 2025-11-22]