JIHO KIM

Cheongju, Chungcheongbuk-do, Republic of Korea

(+82) 10-7552-1347 | jiho207@chungbuk.ac.kr | LinkedIn/Website

EDUCATION

Master of Urban Engineering 2024.03 – 2026.02
Chungbuk National University, Cheongju, Republic of Korea
  − Thesis: Utility-based Multiple Transportation Mode i2SFCA for Estimating Potential Demand: A Case Study of Commercial Facilities

Bachelor of Science in Urban Engineering 2018.03 – 2024.02
Chungbuk National University, Cheongju, Republic of Korea

EXPERIENCE

Lab Leader, Urban Economics and Spatial Analysis Lab 2023.09 – 2026.02
Chungbuk National University, Cheongju, Republic of Korea

Teaching Assistant, Data Mining Fall 2023
Chungbuk National University, Cheongju, Republic of Korea
  − Urban data collection, processing, analysis, and interpretation using Python

Exchange Student, University of Wolverhampton, UK 2023.01 – 2023.06
  − City and Urbanism, Research Methods, The Story of English

Research Assistant, Korea Research Institute for Human Settlements (KRIHS) 2021.07 – 2021.09
Sejong, Republic of Korea
  − Compiled and systematized urban regeneration activation plan documents to support national policy research

Military Service, Republic of Korea Army (Driver) 2019.09 – 2022.03

PEER REVIEWED JOURNAL PUBLICATIONS

1. Kim, J., Lee, B. K., Huh, D., & Kwon, K. (2025). The Effects of School Districts Adjustments on Educational Accessibility and Operational Efficiency Based on Projected Grid-Level School-Age Population. Journal of Korea Planning Association, 60(4), 204-219. https://doi.org/10.17208/jkpa.2025.08.60.4.204

2. Yoon, S., Kim, J., Seo, J., & Kwon, K. (2025). Competitive Effects in Spatial Accessibility: A Case of Pediatrics Using the 2SFCA Model. Journal of the Korean Regional Science Association, 41(2), 35–49. https://doi.org/10.22669/KRSA.2025.41.2.035

3. Kim, J., & Kwon, K. (2024). Estimating Effective Population Size of Urban Functions Using Inverted Two Step Floating Catchment Area (I2SFCA) Method. The Korea Spatial Planning Review, 27(1), 21-38. https://doi.org/10.15793/kspr.2024.123..002

4. Kim, J., & Kwon, K. (2024). Evaluating Urban Function Accessibility Using the Improved 2SFCA (i2SFCA) Method. Journal of the Korean Urban Geographical Society, 27(1), 1–15. https://doi.org/10.21189/JKUGS.27.1.1

RESEARCH INTERESTS

1. Spatial Analysis and Urban Analytics
2. Travel Behavior and Mobility Analysis
3. Accessibility and Choice Modeling
4. Agent-based Simulation
5. Machine Learning Applications
6. Computer Vision for Urban and Mobility Data

MANUSCRIPTS UNDER REVIEW

1. Kim, J., Kim, J., & Kwon, K. (2025). Machine Learning-based Trip Purpose Classification for Activity-based Travel Demand Modeling.
    - Submitted to IET Intelligent Transport Systems.
    - Decision: Major Revision

CONFERENCE PRESENTATION (INTERNATIONAL)

1. Kim, J. and Kwon, K., 2024, Assessing Educational Equity Based on School Attendance Areas: Utilizing the Inverted Two-Step Floating Catchment Area (I2SFCA) Model, International Conference of Asian-Pacific Planning Societies (ICAPPS), Seoul, Korea, 23 August, 2024.
2. Kim, J. and Kwon, K., 2024, An I2SFCA Approach to Estimating the Market Potential of Urban Amenities: The Case of Korea, The 28th Pacific Conference of the Regional Science Association International (PRSCO), Daegu, Korea, 6 August, 2024.

CONFERENCE PRESENTATION (DOMESTIC)

1. Kim, J. and Kwon, K., 2025, Developing a Potential Demand Estimation Model for Urban Services through Multi-modal Utility-based Extension of the I2SFCA Approach, Fall Conference of the Korean Regional Association, Daejeon, Korea, 12 December, 2025. (Best Paper Award)
2. Kim, J. and Kwon, K., 2025, A Multi-modal Utility-Based Inverted 2SFCA Model for Estimating the Effective Population Size of Urban Services, Fall Conference of the Korean Urban Geographical Society, Gongju, Korea, 1 November, 2025.
3. Kim, J. and Kwon, K., 2025, Trip Purpose Prediction Using POI Data and Machine Learning Models, Spring Conference of the Korea Planning Association, Seoul, Korea, 25 April, 2025.
4. Kim, J., Lee, B., Huh, D. and Kwon, K., 2024, Estimating Student Numbers Based on Grid-level School-age Population Forecasts and School District Changes: Focusing on Muju, Jinan, and Jangsu, Fall Conference of the Korean Association of Economic Geographers, Seoul, Korea, 14 December, 2024.
5. Yoon, S., Kim, J., Seo, J. and Kwon, K., 2024, The Importance of Competitive Effects in Measuring Spatial Accessibility: A Case of Pediatrics Using the 2SFCA Model, Fall Conference of the Korean Regional Association, Gimhae, Korea, 7 December, 2024. (Best Paper Award)
6. Kim, J. and Kwon, K., 2024, Measuring the Effective Population Size for Urban Functions Using the I2SFCA Model, Fall Conference of the Korean Regional Association, Gimhae, Korea, 6 December, 2024.
7. Yoon, S., Kim, J., Seo, J. and Kwon, K., 2024, Analyzing Spatial Accessibility to Pediatric Clinics: A Comparison Between G2SFCA and ABFCA Models, Summer Conference of the Korean Urban Geographical Society, Sejong, Korea, 14 June, 2024. (Best Paper Award)
8. Yoon, S., Kim, J., Seo, J. and Kwon, K., 2024, Assessing Spatial Accessibility of Pediatric Clinics Using the ABFCA Model: A Case Study of Sejong City, Spring Conference of the Korean Association for Urban Regeneration, Cheongju, Korea, 25 May, 2024.
9. Kim, J. and Kwon, K., 2023, Exploring the Effective Population Size for Urban Function Maintenance by Function Type, Winter Conference of the Korean Urban Geographical Society, Seoul, Korea, 9 December, 2023.

HONORS & AWARDS

1. Excellence Award (President of the Korean Association for Urban Regeneration Award), 2025 Urban Regeneration & Renewal Research Paper Competition (Dec, 2025)
2. Outstanding Paper Award, 2025 Korean Regional Studies Association Fall Conference (Dec, 2025)
3. Grand Prize, 2024 Gyeongbuk Regional Development Data Visualization Contest (Dec, 2024)
4. Grand Prize (Mayor of Busan Award), 2024 Urban Regeneration & Renewal Research Paper Competition (Oct, 2024)
5. Encouragement Award, 5th Summer BK21 Interdisciplinary Project Festival & Conference (Jul, 2024)
6. Best Paper Award, 2024 Summer Conference, Korean Association of Urban Geographers (Jun, 2024)

RESEARCH PROJECTS

1. Spatiotemporal Optimization of Emergency Medical Systems Using Deep Learning-based Prediction Models of Emergency Demand and Traffic Congestion
    Role: Researcher | Contributions: Data acquisition, Data analysis, Manuscript and report writing

2. Examining Conditions of Borrowed Size within Regional Urban Systems Using Big Data and Machine Learning
    Role: Researcher | Contributions: Data acquisition, Data analysis, Manuscript and report writing

SCHOLARSHIP

1. **Megastudy Scholarship (Academic Support)**, External Organization, KRW 359,800	Spring 2018
2. **Academic Excellence (Freshman C Level)**, Tuition Reduction, KRW 402,000	Spring 2018
3. **Academic Excellence (B1 Level)**, Tuition Reduction, KRW 1,910,000	Spring 2019
4. **Academic Excellence (C Level)**, Tuition Reduction, KRW 402,000	Fall 2019
5. **Academic Excellence (C Level)**, Tuition Reduction, KRW 402,000	Fall 2021
6. **Academic Excellence (C Level)**, Tuition Reduction, KRW 402,000	Spring 2022
7. **Exchange Student Scholarship**, International Office, KRW 3,600,000	Fall 2022
8. **Teaching Assistant (TA) Scholarship**, Government Funded, KRW 336,700	Fall 2023
9. **BK21 Research Scholarship (4th Stage)**, Univ.–Industry Cooperation Foundation, KRW 6,000,000	Spring 2024
10. **BK21 Research Scholarship (4th Stage)**, Univ.–Industry Cooperation Foundation, KRW 6,200,000	Spring 2024
11. **Academic Excellence (C Level)**, Departmental Scholarship, KRW 440,000	Fall 2024
12. **BK21 Research Scholarship (4th Stage)**, Univ.–Industry Cooperation Foundation, KRW 6,000,000	Spring 2025
13. **Academic Excellence (C Level)**, Departmental Scholarship, KRW 440,000	Spring 2025
14. **BK21 Research Scholarship (4th Stage)**, Univ.–Industry Cooperation Foundation, KRW 6,000,000	Fall 2025
15. **Academic Excellence (C Level)**, Departmental Scholarship, KRW 440,000	Fall 2025

SKILLS

Python, R, Vibe Coding, QGIS, EMME 4, VISSIM, SketchUp, Adobe Creative Suite, Figma

LANGUAGES

Korean (Native)
English (Conversational)

PROFESSIONAL MEMBERSHIPS

1. Korean Association of Urban Geographers

2. Korean Regional Science Association

3. Korea Planning Association

REFERENCES

Kyusang Kwon
    Associate Professor, Department of Urban Engineering
    Chungbuk National University, Cheongju, Republic of Korea
    [Google Scholar](#)