Xuan Li
Department of Urban Planning and Engineering
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EDUCATION

Ph.D. Student, Department of Urban Planning and Engineering, Hanyang University, South Korea, 2021-present

GPA: 4.17/4.5 (Completed all required coursework)

Relevant course: GeoAI for Urban Planning, Bayesian Statistics for Urban Analysis, Urban Data Science, Natural Language Processing, Mobile Data Science, Transportation Economics & Policies, Health Systems in a Global Context, Simulation Techniques in Machine Learning, Information Retrieval and Data Mining (GNN), Applied Time Series Analytics

Bachelor of Engineering, Transportation, Southwest Jiaotong University, China, 2017- 2021

Average Grade: 82.51/100

Dissertation: Developing digital platform of tourism resources of the Chengya Railway

Relevant Courses: Transportation System Analysis, Engineering Measurement, Mathematical Modeling, Principles of Urban Planning, Management of Database System, Smart Cities (Coursera), The New Science of City (Beijing City Lab), Introduction of Political Philosophy

RESEARCH INTEREST

Human Mobility, Urban Structures, Machine-Learning in Urban Science, LLM In Urban Big Data Management

Publications

Li, X., Kim, N., & Lee, S. (2025). The Emerging Gender Shift in Urban Mobility: Patterns, Gaps, and Trends across Age Groups in Seoul Metropolitan Area, Korea (Submitted to Journal of Transport Geography, under review)

Li, X., Ha, J., & Lee, S. (2024). Unveiling the roles of public bike systems: From leisure to multimodal transportation. **Travel Behaviour and Society**, 34, 100705.

Li, X., Lee, S., & Yoo, C. (2024). Unveiling the spatial heterogeneity of public transit resilience during and after the COVID-19 Pandemic. **Journal of Public Transportation**, 26, 100091.

Li, X., Ha, J., & Lee, S. (2022). Mobility Resilience of Commute Trips During the Covid-19 Pandemic in Seoul, Korea. **ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences**, X-4-W3-2022, 135–142.

CONFERENCE and PRESENTATIONS

June 2025, “CityAPIBench: A Benchmark of Domain-Adapted Large Language Models for Urban Big Data Query”, will be presented in the 19th International Conference on Computational Urban Planning and Urban Management, London

December 2024, “Pedal Priority: Tailored Strategies for Urban Bike Path Planning”, First Asian Cartographic Conference, Hong Kong

August 2024, “Pre-trained Large Language Models for Urban Science: An Overview of State-of-the-Art work, Challenges, and Potential”, Workshop, Center for Computation Social Science, Hanyang University, Busan

June 2024, “Towards a Holistic Urban Space Evaluation and Monitoring Framework”, The 8th International Smart Data and Smart Cities (SDSC) Conference, Athens, Greece

June 2023, “Citywise: A Novel Approach for Urban Data Analytics and Data Panel using Large Language Models”, The 3rd International Conference on Urban Informatics, Hong Kong

August 2022, “What ‘s the role of sharing bike in Seoul: exploring the trip purpose and interaction between sharing bike and public transit”, The 12th Asian Conference in Regional Science, Ulsan, South Korea

October 2022, “Analysis of Determining Factors of Mobility Resilience during the COVID-19 Pandemic Using the Smart Card Big Data in Seoul, Korea ——Focus on Commute Behavior”, the 7th SDSC and 17th 3D Geoinfo conferences, Sydney, Australia

Research projects

2025, Research Assistant, “Development of Integrated Mobility Service (MaaS) Based on Travel Behavior” funded by Korea National Research Foundation

2024, Research Assistant, “Urban Mobility: Mobility Revolution and Social Equity of Mobility,” funded by Korea National Research Foundation

2022, Research Assistant, "Development of the Mobility Simulator to Analyze Urban Mobility Level and Its Ripple Effects Using Real-time Route Guide API Information," funded by the Korea National Research Foundation

Teaching experience

2024, Mentored 2 undergraduate students through the thesis research and writing process, on the topic of “Simulate transport modal choice using LLM”

2022, Assisted in the instruction of the Course “Urban Data Science” for graduate students

AWARD and SCHOLARSHIP

2024 Asia Carto (Best student paper presentation)

2022 the 7th SDSC and 17th 3D Geoinfo conferences. (Best young research paper)

2021-2025, Red Lion Science scholarship (Full scholarship of PhD expenses)

Skills

Languages: English: IELT 7; Mandarin: Native; Korean: TOPIK 4

Office Software: Latex, Xmind, Notion, Microsoft Office

Data analysis Tools: Python (pandas, pysal, numpy, pytorch), R, Kepler.gl, ArcGIS, SQL