Mushu Zhao

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EDUCATION

2021 – Now	**Ph. D. candidate, Urban Planning and Design** The University of Hong Kong, Hong Kong SAR, China
2019 – 2020	**MSc., Applied Geographic Information System** National University of Singapore, Singapore, Singapore
2015 – 2019	**BSc., Geographic Information Science** Sun Yat-sen University, Guangzhou, China

ACADEMIC EMPLOYMENT

2024	Part-time Senior Research Assistant, Department of Urban Planning and Design, The University of Hong Kong
2020 – 2021	Full-time Research Assistant, Landscape Ecology Research Group, Guangzhou Institute of Geography
2019	Part-time Research Assistant, Department of Geography, National University of Singapore

RESEARCH INTERESTS

Climate-responsive Urbanism
- Environmental Sustainability Associated with Urbanization and Transportation,
- Transportation Electrification and Green Mobility Solutions,
- Urban Heat Events: Impacts and Interactions with Public Transit and Active Travel,
- Green Infrastructure and Environmental Justice

AWARDS AND HONORS

2024	Third Place Award, 2024 CPGIS Student Paper Competition, *The International Association of Chinese Professionals in Geographic Information Sciences*
2023	First Place Award, 2023 United Nations Datathon China Division, *the United Nations Statistics Division (UNSD), the United Nations Committee of Experts on Big Data and Data Science for Official Statistics (UN-CEBD)*
2021	HKU Foundation Postgraduate Fellowship, *The University of Hong Kong*
2017-2018	Third Place Award, Outstanding Student Scholarship, *Sun Yat-sen University*

Publications

Refereed Journal Articles

2025	**Zhao, M.**, Wang, D. & Li, W. (2025). Idle Occupancy and Dead Piles: New Challenges in Public Charging Station Promotion. *Annals of GIS,* 1-21.
2024	**Zhao, M.**, Wang, D., Li, W., & Liu, J. (2024). Unraveling influencing factors of public charging station utilization. *Transportation Research Part D: Transport and*

Environment, 137, 104506.

2024   Hu, Y., **Zhao, M.**, & Zhao, Z. (2024). Uncovering heterogeneous effects of link-level street environment on e-bike and e-scooter usage. *Transportation Research Part D: Transport and Environment*, *136*, 104477.

2020   Tran, P. T., **Zhao, M.**, Yamamoto, K., Minet, L., Nguyen, T., & Balasubramanian, R. (2020). Cyclists' personal exposure to traffic-related air pollution and its influence on bikeability. *Transportation Research Part D: Transport and Environment*, *88*, 102563.

Manuscripts in Submission

[1]   **Zhao, M.**, Wang, D. & Li, W. Extreme Weather, Charging Rate and Moderating Effect of Station Shelters. under review

[2]   **Zhao, M.** & Li, W. Carbon Emission Reduction and Spill-over Effects of High-speed Rail: Empirical Analysis Based on Prefectural Cities in China. under review

[3]   **Zhao, M.**, Lei, S. & Li, W. Incorporating Urban Thermal Comfort into TOD Planning: Non-linear Heterogeneous Built Environment Effects. under review

[4]   **Zhao, M.**, Lei, S., Li, S. & Li, W. Disparities in the Impacts of Extreme Heat Events on Subway Ridership: Evidence from New York City

[5]   Lei, S., **Zhao, M.** & Zhou, J. Rethinking the X-minute City for Older Adults: Insights from Travel Survey through the Lens of Maslow's Hierarchy of Needs

PRESENTATIONS (†PRESENTING AUTHOR)

Papers Presented at Professional Meetings

2024   Zhao, M.†, Wang, D. & Li, W. Extreme Weather, Charging Rate and Moderating Effect of Station Shelters. ACSP2024, November 7-9, Seattle, WA

2024   Zhao, M.†, Wang, D. & Li, W. Idle Occupancy and Dead Piles: New Challenges in Public Charging Station Promotion. *The 31st International Conference on Geoinformatics,* August 14-16, Toronto, Canada

2024   Zhao, M.† & Li, W. Incorporating Urban Thermal Issues into TOD planning: Investigating the Non-linear Built Environment Effects on Pedestrian Heat Exposure. *The 18th International Association for China Planning (IACP) Conference,* July 5-7, Hangzhou, China

Poster Presentations

2023   Zhao, M.† & Li, W. Considering Urban Heat in Transit-oriented Development Planning: A Perspective of Station-level Heat Exposure in New York City Subway. *11th International Conference on Urban Climate,* August 28–September 1, Sydney, Australia

TEACHING

The University of Hong Kong

2023-2024   URBA 6011: Programming and Foundations in Urban Data Analysis (Master of Science in Urban Analytics Programme -Autumn 2023)

URBS 4005: Development Scenarios and Impact Assessment Studio (Bachelor of Arts in Urban Studies Programme-Autumn 2023)

2022-2023	URBA 6011: Programming and Foundations in Urban Data Analysis (Master of Science in Urban Analytics Programme -Autumn 2022)

SKILLS

Programming Languages: Python, R, MATLAB, C/C++, JavaScript, Stata

Geospatial Software: ArcGIS Pro, QGIS, ENVI