Zehui Yin

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🆔 0000-0001-6954-7918   🎓 IC7pmh0AAAAJ&hl   🌐 zehuiyin.github.io | *Updated:* 2024-Nov

Education

McMaster University, PhD in Geography   9/2024 - Present

School of Earth, Environment & Society   Hamilton, Ontario, Canada
Supervisor: Dr. Darren Scott

University of Toronto Scarborough, HBA   9/2020 - 6/2024

Major in Economics for Management Studies   Toronto, Ontario, Canada
Minor in Geographic Information Science & Applied Statistics
Certificate in Computational Social Science
Graduated with High Distinction
Cumulative GPA: 3.98 out of 4

Honours & Awards

Graduation Prize in Management and Economics   2024

C$250 award for the top student graduating from the Department of Management
and Economics

Governor General's Silver Medal   2024

Highest academic standing upon graduation from a bachelor's degree program
There are three silver medals awarded at the University of Toronto

University of Toronto Excellence Awards   2023, 2024

C$7500 scholarship for undergraduate students to conduct summer research projects

Department of Human Geography Outstanding Academic Performance Award   2024

Highest graduating cumulative GPA in the Minor in Geographic Information Systems

Vincent Bladen In-course Scholarships   2023

C$300 scholarship for exceptional academic achievement

Sotherton Wadhams In-course Scholar   2023

C$1500 scholarship for high academic standing

University of Toronto Scarborough Dean's List   2021, 2022, 2023

Annual GPA equal to or greater than 3.5 in the previous academic year

University of Toronto Scholar   2021

C$1500 scholarship for top 20 students in the previous academic year

Professional Experiences

Research Assistant, *TransLAB*, *McMaster University*   9/2024 - Present

Project 1: Map Matching Hamilton Bike Share GPS Data
Project 2: "Future Mobility in Canada Survey"
Supervised by: Dr. Darren Scott

Research Assistant, *Suburban Mobilities Cluster*, *University of Toronto*   11/2022 - 8/2024
Scarborough

Project 1: "Newcomers' Accessibility to Agencies in Scarborough"
Project 2: "Metrolinx Service for OSAP Students at UTSC"
Project 3: "Towards sustainable neighborhoods? Tensions and heterogeneous transport priorities among suburban residents"
Project 4: "Evaluating the transit accessibility and equity of the Bus Rapid Transit (BRT) system: The case of Dar-es-Salaam, Tanzania"
Project 5: "Toronto Cycling Survey"
Project 6: "Neighbourhood Satisfaction in Scarborough: A Discrete Choice Analysis with Spatial Effects"
Project 7: "Cycling evolution in Toronto (1999-2023)"
Supervised by: Dr. Steven Farber, Dr. Andre Cire, and Dr. Ignacio Tiznado-Aitken

Research Assistant (Volunteer)   5/2022 - 8/2022

Project 1: "Shared e-scooters as a last-mile transit solution? Travel behavior insights from Los Angeles and Washington D.C."
Project 2: "Survey of Evacuation Behavior in the 2021 Marshall Fire, Colorado"
Project 3: "Digital Twin with Real-time Transit Data: UF Campus with RTS"
Project 4: Developing Spatial Interpolation Functions for Sociodemographic and Built-environment Variables in R
Project 5: "The E-scooter as a Feeder-mode to Transit: Re-evaluating a Common Assessment Protocol"
Supervised by: Dr. Xiang 'Jacob' Yan

Teaching Experiences

ENVSOCTY 2GI3 Geographic Information Systems, *McMaster University*   Fall 2024

Teaching Assistant for Dr. Darren Scott
Conducted weekly lab sessions for two groups of approximately 25 students each
Invigilated examinations and graded assignments and tests

GGRA30H3 Geographic Information Systems (GIS) and Empirical   Summer 2023
Reasoning, *University of Toronto Scarborough*

Teaching Assistant for Dr. Shaila Jamal
Conducted weekly lab sessions for around 30 students
Held weekly office hours to provide additional support
Invigilated examinations and graded assignments and tests

Publications & Reports

Mwesigwa, L., **Yin, Z.**, & Farber, S. (2024). Evaluating the level of access and equity of the bus rapid transit (BRT) system: The case of Dar-Es-Salaam, Tanzania. *Journal of Transport Geography*, *119*, 103953. https://doi.org/10.1016/j.jtrangeo.2024.103953

Yin, Z., Rybarczyk, G., Zheng, A., Su, L., Sun, B., & Yan, X. (2024). Shared micromobility as a first- and last-mile transit solution? Spatiotemporal insights from a novel dataset. *Journal of Transport Geography*, *114*, 103778. https://doi.org/10.1016/j.jtrangeo.2023.103778

Huang, E., **Yin, Z.**, Broaddus, A., & Yan, X. (2024). Shared e-scooters as a last-mile transit solution? Travel behavior insights from Los Angeles and Washington D.C. *Travel Behaviour and Society*, *34*, 100663. https://doi.org/10.1016/j.tbs.2023.100663

Forrister, A., Yan, X., **Yin, Z.**, Zhao, X., Cova, T., Lovreglio, R., Nilsson, D., & Kuligowski, E. (2022). Survey of Evacuation Behavior in the 2021 Marshall Fire, Colorado. *Natural Hazards Center Quick Response Grant Report Series*, *349*. Boulder, CO: Natural Hazards Center, University of Colorado Boulder. Available at: https://hazards.colorado.edu/quick-response-report/survey-of-evacuation-behavior-in-the-2021-marshall-fire-colorado

Work in Progress

What Makes People Happy with Their Neighbourhoods? Exploring Individual Characteristics Beyond Sociodemographics in Scarborough, Ontario, *with Shaila Jamal, and Steven Farber*

Towards sustainable neighborhoods? Tensions and heterogeneous transport priorities among suburban residents, *with Ignacio Tiznado-Aitken, and Steven Farber*

Conference Presentations

(Note: Presenters are underlined.)

Yin, Z., Rybarczyk, G., Zheng, A., Su, L., Sun, B., & Yan, X. (2024). Shared micromobility as a last-mile transit solution? Spatiotemporal insights from a novel dataset. The Inagural U.S. Department of Transportation Future of Transportation Summit, Washington DC.

Yin, Z., Rybarczyk, G., Zheng, A., Su, L., Sun, B., & Yan, X. (2024). Shared micromobility as a first-and last-mile transit solution? Insights from a novel dataset. The Transportation Research Board 2024 Annual Meeting.

Mwesigwa, L., **Yin, Z.**, & Farber, S. (2024). Evaluating the Transit Accessibility and Equity of the Bus Rapid Transit (BRT) System: The Case of Dar-Es-Salaam, Tanzania. The Transportation Research Board 2024 Annual Meeting.

Tiznado-Aitken, I., **Yin, Z.**, & Farber, S. (2023). Towards sustainable neighborhoods? Heterogeneous transport priorities among suburban Scarborough residents. NECTAR Cluster 6-7 Workshop – Sustainable neighborhoods: Urban and transport planning for sustainable urban living. Coimbra, Portugal.

Huang, E., **Yin, Z.**, Broaddus, A., & Yan, X. (2023). Transit and shared e-scooter integration: Travel behavior insights from Los Angeles and Washington D.C.. The Transportation Research Board 2023 Annual Meeting.

Invited Talks

"What Makes People Happy with Their Neighbourhoods? Exploring Individual Characteristics Beyond Sociodemographics in Scarborough, Ontario." *Suburban Mobilities Research Day*, *University of Toronto*. Toronto, Ontario. November 14, 2024.

"Toward Equitable Service Provision: A Catchment Area Analysis of The Bike Share Toronto System." *Civic Hacknight #441*, *Civic Tech Toronto*. Toronto, Ontario. April 30, 2024. https://www.youtube.com/watch?v=YDkwUKb83GM

"Investment Priority on Transportation Infrastructures." *Suburban Mobilities Cluster Day*, *University of Toronto*. Toronto, Ontario. June 9, 2023. https://www.mobilitynetwork.utoronto.ca/suburban-mobilities-cluster-at-utsc-celebrates-its-first-research-day-with-a-focus-on-improving-transportation-at-scarborough

Departmental Service

Student Associate, *Esri Canada GIS Centers of Excellence at McMaster*	2024 - Present
Member, *School of Earth, Environment & Society School Council*	2024 - Present
Geography Representative, *School of Earth, Environment & Society Graduate Student Collective*	2024 - Present

University Service

Member, *Social Science Student Research Ethics Committee (SocSciSREC), McMaster University*	2024 - Present

Professional Service

Manuscript Reviewer, *Journal of Urban Technology* (1)

Languages

English: Full Professional Proficiency

Mandarin Chinese: Native Language

Research Interests

Spatial Analysis, Econometrics, Transportation Equity, Public Transit & Micromobility, and Cartography & Data Visualization

Programming Languages & Software

Proficient: R (Spatial/GIS: *sf*, *terra*, *sp*, *raster*, *r5r*; Modelling: *apollo*, *tidymodels*; Visualization: *ggplot2*, *plotly*, *shiny*), ArcGIS Pro, ArcGIS Online, Markdown, Microsoft Office suite

Working experience: Python (Spatial/GIS: *GeoPandas*, *rioxarray*, *Rasterio*, *Xarray*; Data Science: *NumPy*, *pandas*; Visualization: *Matplotlib*), SQL, QGIS, LaTeX, Overleaf, HTML, CSS, JavaScript, Leaflet, Turf.js, MapLibre GL JS, Mapbox GL JS, Git, GitHub

References

Available upon request