Zehui Yin

© 0000-0001-6954-7918 **TOTPMHOAAAAJ&hl** gehuiyin.github.io | *Updated*: 2025-Jan **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

Zehui Yin - CV 1/5

2021

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"

Project 3: "Transportation Tomorrow Survey"

Supervised by: Dr. Darren Scott

Research Assistant, Suburban Mobilities Cluster, University of Toronto Scarborough

11/2022 - 8/2024

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 4GA3 Applied Spatial Statistics, McMaster University

Winter 2025

Teaching Assistant for Dr. Antonio Paez

Conducted weekly lab sessions for two groups of approximately 24 students each Graded assignments, midterm and final reflections

ENVSOCTY 2GI3 Geographic Information Systems, McMaster University

Fall 2024

Zehui Yin - CV 2/5

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 Reasoning, University of Toronto Scarborough

Summer 2023

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

- Tiznado-Aitken, I., **Yin, Z.**, & Farber, S. (2025). Towards sustainable neighbourhoods? Tensions and heterogeneous transport priorities among suburban residents. *Transportation Research Part D: Transport and Environment*, 138, 104514. https://doi.org/10.1016/j.trd.2024.104514
- 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

From 1999 to 2023: Trends in Cycling Comfort on Toronto's Roads, with Ignacio Tiznado-Aitken, and Steven Farber

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

Conference Presentations

(Note: Presenters are underlined.)

Zehui Yin - CV 3/5

Yin, Z., Rybarczyk, G., Zheng, A., Su, L., Sun, B., & <u>Yan, X.</u> (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.

<u>Tiznado-Aitken, I.</u>, **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." *Geographic Information Science (GIS) Day, McMaster University*, Hamilton, Ontario. November 21, 2024.

"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 |
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| Member, School of Earth, Environment & Society School Council | 2024 - Present |
| Geography Representative, School of Earth, Environment & Society | 2024 - Present |
| Graduate Student Collective | |

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University Service

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

Professional Service

Manuscript Reviewer, Journal of Cycling and Micromobility Research (1), 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

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