

## Yu Zhang | CV

Postdoctoral Fellow, Ph.D. of Civil Engineering  
Department of Civil & Mineral Engineering  
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## EDUCATION

- 2024 Ph.D., Department of Civil & Mineral Engineering, University of Toronto, Toronto, ON, Canada
- 2019 M.Sci., School of Urban Planning and Design, Peking University, Beijing, China
- 2016 B.P.A., School of Public Administration, Zhejiang University, Hangzhou, China

## EMPLOYMENT HISTORY

- 2024-present Post-doctoral Research Fellow; Department of Civil & Mineral Engineering, University of Toronto  
Consultant Project for Infrastructure Canada (INFC) on Transportation Data Harmonization & Evaluation of Avoided GHG Emissions of Transit Investment
- 2019-2024 Doctoral Research Assistant; Advisor: Eric J. Miller; Department of Civil & Mineral Engineering, University of Toronto  
Agent-based simulation and modelling of the land use submodule of the Integrated Land use, Transportation, Environment (ILUTE) urban systems
- 2018 Visiting Scholar; Advisor: Xiaoguang Wang; Department of Geography, Central Michigan University  
Accessibility analysis and residential location choice modelling, daily travel behaviour analysis based on cellular signal dataset
- 2016-2019 Graduate Research Assistant; Advisor: De Tong; Ian MacLachlan; School of Urban Planning and Design, Peking University  
Strategic planning for Shenzhen-Shanwei Special Cooperative Zone (SSCZ), and research on the social capital generated in urban villages, migrant housing and residential segregation
- 2016 GIS Data Analyst Intern; Accenture (China) Co., Ltd.  
City electricity network development and maintain for the G20 Summit 2016
- 2015 Housing Planning and Land Investment Intern; Vanke (China) Co., Ltd.  
Integrated community development for the Liangzhu housing project in Hangzhou

## AWARDS & FELLOWSHIP

- 2019-2024 University of Toronto Fellowship, Department of Civil Engineering
- 2019-2020 Richard Soberman Graduate Student Fellowship, University of Toronto
- 2018-2019 Graduate Dissertation Grant, Peking University – Lincoln Institute
- 2016-2018 School Principal Scholarship, Peking University

## TEACHING DEVELOPMENT

### Department of East Asian Studies, University of Toronto

EAS 273 Modern Chinese Cities, Course Instructor

### Department of Civil & Mineral Engineering, University of Toronto

CIV 1535 Transportation and Development, Guest Lecturer

CIV 331 Transportation Planning I, Teaching Assistant

TEP1204 Teaching Higher Education in Engineering, Prospective Professor in Training

CIV1535 Transportation and Development, Teaching Assistant

### Communication University of China

Summer School of Artificial Intelligence and Social Network Analysis, Teaching Assistant

## PUBLICATIONS

### Manuscripts under review

- [9] **Zhang, Y.\*** Conceptual Framework Design for the Agent-based Modelling in Micro-level Housing Finance Dynamics. *Journal of Urban Planning and Development*.
- [8] **Zhang, Y.\***, Miller, E. J. Location Choice of Residential Housing Supply: an application of the Multiple Discrete-Continuous Extreme Value (MDCEV) Model. *Journal of Choice Modelling*.
- [7] **Zhang, Y.\***, Miller, E. J. Modelling Housing Supply: Autoregressive Distributed Lag Model Approach for Evaluating Construction. *International Journal of Housing Market and Analysis*

### Peer-Reviewed Journal Articles

- [6] **Zhang, Y.\***, Miller, E. J. (2024). Analyzing Housing Supply Location Choice: A Comparative Study of the Modelling Frameworks. *Scientific Reports*. DOI: 10.1038/s41598-024-51754-9
- [5] **Zhang, Y.\*** (2023). De-peripheralization and rural land capitalization: An empirical study of a public–private partnership in Zhaoqing, China. *Regional Science Policy & Practice*. DOI: 10.1111/rsp3.12713
- [4] **Zhang, Y.\***, Miller, E. J. (2022). Predicting housing construction period based on a cox proportional hazard model—an empirical study of housing completions in the greater Toronto and Hamilton area. *Environment and Planning B: Urban Analytics and City Science*. DOI: 10.1177/23998083221143386.
- [3] **Zhang, Y.\***, Rahman, A., & Miller, E. (2022). Longitudinal modelling of housing prices with machine learning and temporal regression. *International Journal of Housing Markets and Analysis*. DOI: 10.1108/IJHMA-02-2022-0033
- [2] **Zhang, Y.\***, Zhang, D., Miller, E. J. (2020). Spatial Autoregressive Analysis and Modeling of Housing Prices in the City of Toronto. *Journal of Urban Planning and Development*. DOI: 10.1061/(ASCE)UP.1943-5444.0000651.
- [1] Tong, D., **Zhang, Y.**, MacLachlan, I.\*, Li, G. (2020). Migrant housing choices from a social capital perspective: The case of Shenzhen, China. *Habitat International*, 96, 102082. DOI: 10.1016/j.habitatint.2019.102082

## PRESENTATIONS

- 2024                      *An Investigation of the Housing Market and the Supply Modelling Process*. PhD thesis presented at the 5<sup>th</sup> World Symposium of Transport and Land Use (WSTLUR) Conference, PhD thesis award workshop. Bogotá, Colombia.

- 2024 *Location Choice of Residential Housing Supply: an application of the Multiple Discrete-Continuous Extreme Value (MDCEV) Model*. Paper presented at the 5<sup>th</sup> World Symposium of Transport and Land Use (WSTLUR) Conference. Bogotá, Colombia.
- 2021 *Longitudinal Modelling of Property Transaction Price with Machine Learning Algorithms*. Paper presented at the 4<sup>th</sup> World Symposium of Transport and Land Use Research (WSTLUR) Conference. Portland, OR, US
- 2021 *Predicting Housing Construction Duration with Cox Proportional Hazard Model*. Paper presented at The North American Regional Science Council (NARSC) 2021 Annual Conference. Denver, CO, US
- 2019 *Migrant housing choices from a social capital perspective: The case of Shenzhen, China*. Paper presented at the Annual Conference of American Association of Geographers (AAG). Washing D.C., US
- 2018 *Migrant Housing Needs and Urban Villages*. Guest lecture at Hong Kong Baptist University, Department of Geography Public Seminar Series. Hong Kong, China

## SERVICE & MEMBERSHIP

### *Journal Peer Reviewer*

*Regional Science: Policy & Practice*  
*Journal of Housing and Built Environment*  
*Cities*  
*Applied Geography*

### *Organization of Conferences, Workshops, Panels, Symposia*

- 2024 Co-organizer, Emerging Mobility Scholars Conference and Summer School, University of Toronto, Toronto ON

### *Organizational Membership*

Student Member, *Canadian Institute of Planners (CIP)*, 2020 – present  
 Mentor, *Society for Canadian Women in Science and Technology (SCWIST)*, 2021 – present  
 Student Ambassador, *Ontario Network of Women in Engineering (ONWiE)*, 2021 – present  
 Student Member, *Canadian Society for Civil Engineering (CSCE)*, 2022 - present  
 Student Member, *Association of Collegiate Schools of Planning (ACSP)*, 2018 - present  
 Student Member, *American Association of Geographers (AAG)*, 2018 - present

## REFERENCE

Eric J. Miller, Ph.D.  
 Professor  
 Department of Civil and Mineral Engineering  
 University of Toronto  
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Ian MacLachlan, Ph.D.  
 Professor  
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