

Xiaohuan Zeng

Minneapolis, MN 55455 | zeng0170@umn.edu | 612-442-2009

EDUCATION

University of Minnesota Twin Cities

PhD in Geographic Information Science, GPA 4.0, College of Liberal Arts

Master of Science in Computer Science, GPA 3.9, College of Science and Engineering

Wuhan University

Bachelor of Science in Geographic Information Science, GPA 3.9

Minneapolis, MN

Expected in May 2026

Dec 2024

Wuhan, China

May 2020

SKILLS

Programming Languages: Python, SQL, R, Javascript

Software and Tools: ArcGIS, Git, Database, Microsoft Excel, statistical software (Stata, SPSS)

Expertise: Statistical Modeling, Machine Learning, Data Analysis, Data Visualization

INTERNSHIPS

Analyst Intern, RSG Inc., Remote

May 2024 – Aug 2024

- Calibrated travel demand models using Python to assist in transportation planning
- Developed Python pipelines to clean and visualize travel survey data to convey results to customers
- Collaborated with consultants and developers while managing multiple tasks concurrently

Data Science Intern, Metro Transit, Minneapolis, MN

May 2023 – Aug 2023

- Applied time-series and spatial Bayesian models to predict transit ridership and bus travel time
- Developed an interactive dashboard to visualize transit ridership trends and monitor transit system performance
- Self-learned R and Shiny in a short time to enhance analytical capabilities and meet project requirements

Transportation Planning Intern, Twin Cities Metropolitan Council, St. Paul, MN

May 2022 – Aug 2022

- Processed and analyzed datasets using Python scripts to address urban transportation challenges
- Improved time-series models for predicting daily traffic volumes based on various influencing factors
- Presented analytical findings to diverse stakeholders including both technical and non-technical audiences

RESEARCH EXPERIENCE

Research Assistant, Department of Geography, Environment & Society, UMN

Aug 2023 – Present

- Evaluated transit service reliability using a large amount of bus location data
- Applied machine learning methods to identify key predictors affecting transit reliability
- Collaborated with local transportation agencies, providing valuable insights for planning initiatives

Research Assistant, Hubert H. Humphrey School of Public Affairs, UMN

May 2022 – May 2023

- Developed a Python prototype to analyze travel survey data from over 400 individuals across 10+ communities
- Created 50+ visualizations to effectively communicate travel behavior insights in a workshop
- Applied statistical models to explore the relationship between travel segregation and self-reported emotions

LEADERSHIP AND OUTREACH EXPERIENCE

Graduate Leadership Program, The Institute on the Environment, UMN

Sept 2024 – Present

Communication Officer, Geospatial Information Sciences Student Organization, UMN

May 2024 – Present

- Communicate with employers, university faculty, staff, and students to plan and promote events
- Organize and coordinate regular coffee hours, special social events, and a GIS career fair

Conference Volunteer, Esri Developer Summit

Mar 2024

AWARDS AND FUNDINGS

University of Minnesota, Research and Conference Funds

2021-2023

University of Minnesota, College of Liberal Arts Graduate Fellowship

2022

Wuhan University, Yu Gang • Song Xiao Scholarship

2020

Wuhan University, China National Scholarship

2019