Zhaowen Guo

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EDUCATION

University of Washington — Seattle, WA
Ph.D. candidate in political science — *Sept 2018 - Jun 2024 (expected)*
Method Specialization: *Survey Analytics, Experimental Methods, Data Visualization*

ADDITIONAL TRAINING

- **Survey and psychometrics**: Psychometrics & Applied Analytics (PAA) Graduate Certificate
- **Statistical modeling**: Center for Statistics and the Social Sciences (CSSS) Certificate, Graduate Data Science Certificate
- **Computational social science**: Summer Institute in Computational Social Science (SICSS) Certificate

WORK EXPERIENCE

eScience Institute — Seattle, WA
Data Scientist Intern — *Jun 2022 - Aug 2022*
- **Coding with R and SQL**: Designed an algorithm that leverages over 10 million longitudinal administrative data to predict household groupings, resulting in a 9% decrease in error rate
- **Survey analytics**: Utilized statistical analyses and visualizations to link household groupings with American Community Survey, contributing to the development of targeted plans for poverty reduction in Seattle
- **Stakeholder engagement**: Collaborated cross-functionally with government officials, community leaders, and researchers to incorporate household data into policy-making processes

Center for Statistics and the Social Sciences — Seattle, WA
Quantitative Researcher — *Sept 2020 - Sept 2021*
- **Survey analytics**: Implemented Bayesian item response theory and differential item functioning to model guessing behavior in knowledge-based questions among 1,881 respondents, leading to improvement of item fairness
- **Survey analytics**: Applied confirmatory factor analysis and mediation analysis to estimate the effect of information exposure on policy support among 3,000 respondents
- **Data scraping and visualization**: Extracted legislator data from 2000 to 2021 and enhanced bill data with additional metadata to contribute to an interactive visualization tool called Legislative Explorer

Center for Social Science Computation and Research — Seattle, WA
Data and Research Consultant — *Sept 2021 - present*
- **Programming and statistics**: Conducted 12 workshops on data visualization, data wrangling, and introductory statistics using R to facilitate statistical training for underrepresented students
- **Research consulting**: Provided data and research consulting services 80 hours per month to improve the research design for social science faculty and students

PROJECTS

Legal Mobilization and Land Disputes: A Survey Experiment
- **Survey analytics and experimental methods**: Fielded a randomized survey experiment among 1,122 rural households using multi-stage stratified sampling to identify key drivers of conflict resolution
- **Research presentation**: Presented at three academic conferences and received the Best Paper Award for Graduate Students

When Caretaking Meets Monitoring: A Conjoint Experiment on Public Support for Surveillance
- **Survey analytics and experimental methods**: Conducted a simulation-based power analysis to identify the sample size, contributing to the design of an online conjoint survey experiment
- **Research presentation**: Presented at one academic conference and received a travel award

SELECTED HONORS AND AWARDS

- Collaborative Midterm Survey Travel Award, Cornell Center for Social Sciences - Dec 2022
- CSSS Travel Award, University of Washington - Nov 2022
- Young Scholar Award, China Times Cultural Foundation - Sept 2022
- Data Science for Social Good Summer Fellowship, University of Washington - May 2022
- SICSS Research Grant, Social Science Research Council - Dec 2021
- David J. Olson Graduate Research Grant, University of Washington - 2021 to 2022
- Richard B. Wesley Fellow in Comparative Politics, University of Washington - 2020 to 2021

SKILLS

- **Programming**: Experienced in R, Python, SQL, Qualtrics, QGIS, LaTeX
- **Relevant coursework**: Survey Instrument Development, Structural Equation Modeling, Item Response Theory, Multivariate Data Analysis, Multilevel Modeling, Maximum Likelihood Estimation, Machine Learning, Time Series and Panel Data, Text Analysis, Spatial data analysis, Intermediate Data Programming, Software Development for Data Scientists, Data Visualization