

# Zhaowen Guo

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## EDUCATION

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- **University of Washington** Seattle, WA  
PhD candidate in political science *Sept 2018 - Jun 2024 (expected)*
- **Columbia University** New York, NY  
MA in political science *Sept 2016 - May 2017*

## ADDITIONAL TRAINING

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**Survey analytics:** Psychometrics & Applied Analytics (PAA) Graduate Certificate

**Data science:** Center for Statistics and the Social Sciences (CSSS) Certificate

**Computational social science:** Summer Institute in Computational Social Science (SICSS) Certificate

## WORK EXPERIENCE

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- **Hans Rosling Population Health Center** Seattle, WA  
Data Scientist Intern *Jun 2023 - Aug 2023*
  - Collaborated with statistical demographers to develop a wide range of metrics analyzing internal migration within King County, providing insights into the spatial and temporal structure of migration dynamics
  - Developed and presented static and interactive visualizations using R and QGIS to illustrate housing supply trends and migration patterns, contributing to evaluating housing policies in King County
- **eScience Institute** Seattle, WA  
Data Scientist Intern *Jun 2022 - Aug 2022*
  - Designed and implemented an algorithm utilizing R and SQL to analyze over 10 million longitudinal administrative data records, resulting in accurate prediction of household groupings and a 9% decrease in error rate
  - Collaborated cross-functionally with government officials, community leaders, and researchers in Washington State to incorporate household data into policy-making processes
- **Center for Social Science Computation and Research** Seattle, WA  
Data and Research Consultant *Sept 2021 - present*
  - Developed and delivered a curriculum for quarter-long workshops focused on data visualization, data wrangling, and introductory statistics using R to enhance statistical training for underrepresented students
  - Provided 80 hours per month of data and research consulting services for social science faculty and students, assisting them in troubleshooting coding questions and refining research designs

## SELECTED PROJECTS

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- **Seeing Like a State: Causes and Consequences of Government Surveillance**  
(Dissertation)
  - Conducted simulation-based power analyses, drafted comprehensive questionnaires, and developed experimental designs for two online survey experiments to analyze public opinion on surveillance technologies
  - Applied confirmatory factor analysis and mediation analysis to a sample of various weighting schemes, contributing to estimating the effect of information exposure on public support for surveillance
  - Secured \$30,000 research grant, presented at four academic conferences, received recognition with one Best Paper Award, and was nominated for the Presidential Dissertation Fellowship
- **To Combat Gun Violence, Green the Neighborhood**  
(Green Space Data Challenge)
  - Developed visualizations using R to demonstrate disparities in exposure to gun violence and access to green spaces across different racial groups in Washington DC, and provided statistical analyses evaluating the impact of green spaces on gun violence incidents
  - Received recognition as a first-place winner and was invited to present at the 2023 APDU Annual Conference and the 2023 Learning Data for Good Conference

## SKILLS

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**Programming:** Experienced in R, Python, SQL

**Data science:** data collection (webscraping, geocoding), data wrangling (tidyverse, pandas), data visualization (ggplot2, R Shiny), survey methods (power analysis, survey weighting, item response theory, structural equation modeling, simulation analysis), statistical modeling (generalized linear models, hierarchical models, multivariate analysis, causal inference, machine learning, spatial data analysis), text analysis (topic models, word embeddings)