

Ziwen (Jasmine) Jia

2311 9th St N, Arlington, VA 22201 | Tel: 717-609-5326 | E-mail: jasminejia434@gmail.com

EDUCATION

Georgetown University, McCourt School of Public Policy

Master of Science in Data Science for Public Policy

GPA: 3.95

University of Michigan – Ann Arbor

Bachelor of Science in Economics

Minor: Applied Statistics

Award: University Honors

Washington, DC

Aug 2023 - Expected May 2025

Ann Arbor, MI

Sept 2020 – Apr 2023

PROFESSIONAL EXPERIENCE

Mathematica, Inc.

Washington D.C.

Part-time Data Scientist

August 2024 - Present

- **Conduct network analysis** of health insurance companies' **claims data**, employing centrality metrics, and modularity optimization algorithms to reveal structural relationships and enhance insights into healthcare system connectivity and integration
- **Design and implement a R package** with **Docker integration** to streamline computational model execution on **AWS SageMaker**, enhancing usability and maintainability for non-technical statisticians; the final product was **adopted company-wide**, standardizing workflows and **improving efficiency across all users**
- Utilize Truveta Prose to aggregate patient demographic and clinical data into **Power BI dashboards**, enhancing maternal health research by identifying and analyzing **trends in maternal morbidity** and health disparities

Massive Data Institute

Washington D.C.

Research Assistant

August 2024 - Present

- Collect and ethically validate data on herbicide glyphosate exposure and its connection to non-Hodgkin's lymphoma (NHL) among farmworkers, linking crop production, migrant seasonal worker, and NHL incidence data to identify target communities; utilize **GIS in R** to map undocumented immigrants that were impacted by glyphosate creating a comprehensive dataset showcased to the Lawyer's Committee, **aiding in class action lawsuit strategies** and targeted outreach efforts
- Analyze racial disparities in police stop data in collaboration with the Georgetown University Law Center Criminal Justice Clinic, employing **spatial regression** to investigate selective enforcement and its impact on racially minoritized groups; collect, clean, geocode, and integrate large datasets using R and Stata for comprehensive empirical analysis, and utilize **machine learning models** to predict patterns of racial disparities in police stop data

Robert Wood Johnson Foundation

Washington D.C.

Data Analytics Research Assistant

August 2023 - August 2024

- Collaborated with the **Census Bureau** to analyze the proportion of racial and ethnic minorities living below the Official Poverty Measure (OPM) and Supplemental Poverty Measure (SPM) who reported receiving the Child Tax Credit, providing critical insights into how tax policies like the CTC promote economic equity among marginalized communities
- Analyzed **state-level** data on the Earned Income Tax Credit (EITC) to identify trends in refundability and state-specific adaptations, providing insights into how different states leverage the EITC **to support low-income families and promote economic mobility**

American Enterprise Institute

Washington D.C.

Intern - Center on Opportunity and Social Mobility

January 2024 - April 2024

- Maintained and update a longitudinal dataset of USDA's **SNAP waivers** with a focus on data recency and accuracy, employing data validation techniques and automation to **track socioeconomic indicators** affecting program eligibility
- Employed advanced analytics using Python and Stata to assist research scholars in investigating persistent poverty, facilitating the publication of influential academic journals and policy reports

Michigan Institute for Data Science

Ann Arbor, MI

Data Science Research Assistant

November 2022 - April 2023

- Conducted a rigorous analysis of wealth disparities due to racial biases, deriving insights into income differentials across racial demographics using Stata's Decomposition Method
- Orchestrated the management of 3.5 million labor market data points using MySQL, and engineered Python **parallelization frameworks**, evaluating the fiscal implication of policy shifts on income and wealth matrices
- **Pioneered a methodology** for Marginal Treatment Effect bounds estimation, enhancing policy parameter analytics

LEADERSHIP

International Student Council

Ann Arbor, MI

Co-leader

September 2021 - April 2023

- Advocated for the interests of international students at the University of Michigan by initiating events such as the "International Career Panel" and "Wellness Week" to cater their specific needs and aspirations
- Led weekly meetings and facilitated robust communication channels between students and faculty

Central Student Government

Ann Arbor, MI

Ex-officio representative

August 2023-April 2024

- Proposed legislation with CSG Members, after the proposal has been passed, implement it with the faculty and staff of the University Community for the betterment of the student body

PROFESSIONAL SKILLS

- | | | | | | |
|----------|-------|----------|----------------------|------------|--------------------|
| • STATA | • AWS | • R | • Microsoft Products | • Tableau | • GIS |
| • Python | • SQL | • MATLAB | • Snowflakes | • Power BI | • Machine Learning |