

Researcher and Ph.D. in quantitative social science and 7 years of experience in research design, project management, public policy, data science, and machine learning innovation. Thoughtful and inclusive leader of interdisciplinary projects, public engagement and communication.

## SKILLS

**Technical** Natural Language Processing · Machine Learning and Pattern Recognition · Spatiotemporal Modeling · Causal Inference · Bayesian Inference · Time Series Analysis · Network Inference · Experiment Design

**Programming & Software:** Python · Statistical Analysis Libraries (Numpy, Scipy, SciKit-Learn, TensorFlow Probability) · SQL · R · Stata · Bash ·  $\text{\LaTeX}$  · STAN · Web Scraping

**Research & Management** Research Team Leadership · Interdisciplinary Collaboration · Undergraduate Mentorship · Policy Design and Implementation · Program Evaluation · Financial Administration · Management in Public and Nonprofit Organizations

## RELEVANT EXPERIENCE

**RESEARCH ASSOCIATE** Department of Political Science | Ohio State University 2017 -present

**Project: Political Elites and The Public Sphere Online**

- Led and mentored research projects in computational social science with faculty, junior graduate students, and undergraduate research assistants.
- Created Python, R functions, and packages to analyze network and communication data and interact with APIs.
- Constructed original datasets, including a dataset of over 100,000 political elites' social media accounts and elite interviews with interest groups.
- Crafted technical reports, manuscripts for conference presentations, publications, and white papers.
- Designed novel network inference techniques that utilize text data to understand agent interactions.

**Project: Open Data and Political Narratives**

- Established a multiple-year technical project plan for and led analysis with an interdisciplinary, multi-university research team and outside partnerships including LexisNexis and Google Cloud Academic Research.
- Technical research leadership for a team of 7 computer science and math research assistants
- Created datasets of congressional speech networks based on 80 years of congressional records and original data to analyze presidential pardon patterns and policies.

**FELLOW** Institute of Democratic Engagement & Accountability | Ohio State University 2017-present

- Designed impact evaluation strategies, conducted legislative research and developed policy recommendations and materials engagement between Members of Congress and their constituents.
- Organized and planned in-person demonstrations of research for government officials, academics, and private industry affiliates.
- Co-authored white papers and analyzed deliberation session outcomes and research team.
- Participated in the coordination of government and institute collaborations.

**SCHOLAR** Program in Statistics and Methodology Senior Scholar (2021 - 2022); Junior Scholar (2019-2020) | Ohio State University

- Consulted on research projects and methodological challenges with faculty and senior graduate students focusing on research design, statistical analysis, model interpretation, and data visualization.
- Taught workshops for Social and Behavioral Sciences on specific quantitative methods, including text processing, web scraping, and using high-performance computing resources.
- Supported faculty adoption and implementation of Python software for courses and research.
- Organized external speaker series and workshops.

**RESEARCH CONSULTANT** Abdul Latif Jameel Poverty Action Lab 2017 | Massachusetts Institute of Technology

- Research assistant for program evaluation analysis and drafting policy papers.
- Identified outcomes on universal basic income studies and compiled findings through archival research.
- Conducted initial statistical investigation of mobile money experiments from field studies.

## ADDITIONAL EXPERIENCE

- Administration Executive, 2013-2016 | Massachusetts Institute of Technology
- Computer Science Instructor of Record, 2012-2013 | Ohio State University

## EDUCATION

The Ohio State University Ph.D., Political Science August 2023, (expected) OSU Presidential Fellowship recipient

Brown University M.P.A., Public Administration, 2017 Data-Driven Policy Concentration

The Ohio State University B.A., History, 2012 B.A., Music, 2012 with honors and research distinctions