

DUNCAN J. MAYER

QUANTITATIVE SOCIAL SCIENTIST

DuncanMayer77@gmail.com · [Personal Website](#) · [Github](#) · [LinkedIn](#)

SUMMARY

I am a quantitative social scientist (data scientist) with nearly a decade of experience using data to predict and understand complex behavior and phenomenon. I maintain good coding practices and am comfortable building, evaluating, and interpreting everything from well known algorithms to bespoke models. I bring domain expertise in organizational theory and data use.

PROGRAMMING: R (8 years) | SQL (4 years) | Stan (3 years) | Python (1 year)

STATISTICS: Hierarchical Models | Spatial statistics | Longitudinal data analysis | Machine Learning | Experimentation

EDUCATION

Case Western Reserve University

PhD in Social Welfare

Cleveland, OH

Expected April 2023

Marywood University

Masters of Social Work

Bachelors of Social Work

Scranton, PA

2017

2015

RECENT PROFESSIONAL EXPERIENCE

BeVera Solutions

Statistician

Atlanta, GA

Sept. 2022-Present

- Statistical lead for 3 white papers for the National Center for Immunization and Respiratory Diseases
- Reduced missing data by 10 percent by automating data quality reports using SQL and R

Case Western Reserve University

Research Data Scientist

Cleveland, OH

Aug. 2018-Aug. 2022

- Statistical lead (data collection and modeling) for multiple projects
- Published [multiple first author papers](#) including novel methodologies and state of the art applications
- Communicated methods and insights in over 5 technical talks at scientific conferences and over 150 hours of course lectures
- Co-authored 3 funded research papers paring survey and administrative data
- Developed programming courses for the [data science for social good](#) certificate

The Institute for Public Policy and Economic

Development

Research Analyst

Wilkes-Barre, PA

July 2017-June 2018

- Led data analysis and co-authored 11 funded research papers
- Communicated results to local stakeholders through multiple presentations

EXAMPLE PROJECTS

[Simmer Down Now! A Study of Revenue Volatility and Dissolution in Nonprofit Organizations](#)

- Quantified the effect of revenue volatility on dissolution in nonprofit organizations using archival tax records organizations (N = 2,126,894) and discrete time survival models (R, SQL)

[Can a Measurement Error Perspective Improve Estimation in Neighborhood Effects Research? A Hierarchical Bayesian Methodology](#)

- Developed a probabilistic model to incorporate sampling error into neighborhoods effects research using a full Bayesian Methodology (Stan, R)