Jared Greathouse

Email: jgreathouse3@student.gsu.edu Website: https://jgreathouse9.github.io/

Work Experience

Industry

Data Science Intern, May 23 2023-August 11 2023, Gainwell Technologies

Supervised by Andrew Wheeler, I developed basic skills in GitHub, SQL, and Scrum/Agile framework. I demonstrated how k-means clustering and functional PCA can group metropolitan statistical areas that were similar on number of insurance claims filed over time, using data from their Databricks system.

Academic, Georgia State University

PHD Research Assistant in Public Policy, 2022-(Advised by: Jason Coupet)

PHD Research Assistant in Public Policy, 2021 (Greg Lewis)

Graduate Research Assistant, 2020, (Eric L. Sevigny)

Undergraduate Research Assistant, 2017-2019, (Eric L. Sevigny)

Education

PHD

Public Policy, Fall 2021-(Expected Spring 2026), Advisor: Jason Coupet

Masters Degree

Political Science, Fall 2019-Spring 2021, Advisor: Eric L. Sevigny

• Masters Thesis: "¿Qué diferencia? Application of Difference-in-Differences to Mexico's Drug War" https://tinyurl.com/ygp2tfu7

Bachelors

Political Science, Fall 2015-Spring 2019, Advisor: Eric L. Sevigny

Research Interests

Causal Inference (Relevant Courses: Causal Inference (Masters level, Econ and Public Policy departments), Program Evaluation for Public Policy (PHD level, Public Policy Department)

Applied Econometrics (Relevant Courses: Intro to Political Research Methods, OLS (both masters level, political science department), Generalized Linear Models (PHD level, political science department). Policy: Logit (PHD level, policy department)).

Other

Languages Spoken: English (Native), Spanish (Intermediate)

Programming Languages: Stata (Professional), Python (Intermediate), R (Intermediate), Excel (Intermediate) SQL (Basic)

Skills: Agile Frameworks, Adobe Acrobat, Microsoft Word, Github

Courses Taught

PMAP 4041, Policy Data Analysis, Fall 2024

Software

mlsynth (Under development) – This Python library implements a variety of synthetic control and difference-in-differences estimators for program evaluation. For a tutorial of some of my code, please see: https://github.com/jgreathouse9/mlsynth. Note that this code is under development, and none of it is final yet.

RSL (Under development) – This Python class implements the Robust Synthetic Learner (part of the above **mlsynth**). It is a model averaging estimator between difference-in-differences and synthetic controls.

SCUL (Under development) – This Stata command implements synthetic control estimation using LASSO and time-series cross-validation. Available on **ssc**.

fdid (Version 1 Available) – This Stata command implements forward difference-in-differences from (Kathleen T. Li (2023) A Simple Forward Difference-in-Differences Method. Marketing Science 43(2):267-279). Available from https://github.com/jgreathouse9/FDIDTutorial/tree/main.

Referee Experience

Stata Journal (1) Journal of Policy Analysis and Management (1)

Teaching Experience

Policy Data Analysis (Georgia State University, Fall 2024)

Publications

Refereed Works

Sevigny, Eric L., Greathouse, Jared A. & Medhin, Danye N. (2023). Health, safety, and socioeconomic impacts of cannabis liberalization laws: An evidence and gap map. Campbell Systematic Reviews, 19(4), e1362. https://doi.org/https://doi.org/10.1002/cl2.1362

Sevigny, Eric. L., Pacula, Rosalie L., Aloe, Ariel M., Medhin, Danye N., & Greathouse, Jared A. (2021). Protocol: The effects of cannabis liberalization laws on health, safety, and socioe-conomic outcomes: An evidence and gap map. Campbell Systematic Reviews, 17(1), e1137. https://doi.org/10.1002/cl2.1137

Eric L. Sevigny and Jared A. Greathouse. Replication of a research claim from Weidmann and Callen (2013), from British Journal of Political Science. (2020). Written for the U.S. Department of Defense's Systematizing Confidence in Open Research and Evidence (SCORE)

Non-Refereed Works

Greathouse, Jared A., Bayani, Mani, & Coupet, Jason, Splash! Robustifying Donor Pools for Policy Studies (presented at the Association of Public Policy Analysis and Management, 2023)

Sevigny, Eric L., Johnson, Thaddeus L., Greathouse, Jared A. Predicting Recidivism Fairly: A Machine Learning Application Using Contextual and Individual Data. Final Report for the NIJ Recidivism Forecasting Challenge, 2021

Greathouse, Jared A. "Scalpel. . . Hammer. . . Causal analysis of leadership removal and military interventions in Mexico's Drug War." Georgia State Undergraduate Research Conference, April 2019

Sevigny, Eric L., and Jared A. Greathouse. "The Effect of Mexico's Kingpin Strategy on Drug-Related Violence: A Systematic Review and Meta-Analysis." International Society for the Study of Drug Policy, May 2018.

Works in Progress

Greathouse, Jared A., Bayani, Mani, & Coupet, Jason, Splash! Robustifying Donor Pools for Policy Studies (In Preparation)

Jared A. Greathouse. "Music To My Ears: Ensembling Synthetic Controls and Difference-in-Differences."

Greed is Good: Estimating Forward Difference-in-Differences in Stata. The link for the paper is: https://jgreathouse9.github.io/publications/FDIDSJ.pdf (preparing to submit to Stata Journal in Fall 2024)