LUKE R. STEWART

RESEARCH INTERESTS

Causal inference, nonparametric statistics, heterogeneous treatment effects, statistical learning for clinical and health policy applications.

EDUCATION

University of Pennsylvania

08/2024 - current

Pursuing a PhD in Biostatistics

Massachusetts Institute of Technology

09/2018 - 05/2022

Bachelor of Science in Economics with a minor in Mathematics

Course work includes: Real Analysis, Mathematical Statistics, Econometrics, Linear Algebra, Probability and Random Variables

PROJECTS & PAPERS

Foote, C., Meara, E., Skinner, J., and L. Stewart. Geography and the Widening Educational Divide in U.S. Midlife Mortality. Work in progress.

Stewart, Luke. The Impact of Medicaid Expansion on Risky Behavior in Low Income Individuals. *The MIT Undergraduate Journal of Economics*, Vol. XXI, 2022.

RESEARCH EXPERIENCE

Research Assistant to Dr. Chris Foote, Federal Reserve Bank of Boston

06/2022 - present

- Explored the use of various statistical techniques (including panel data models and PCA) to model macroeconomic data for both policy and research projects using Stata and Python.
- Gathered and cleaned data and produced replication packages for long-term research work in demographics, public health, and macroeconomics.
- Created data visualizations of policy-important datasets for use in monetary policy discussions.

Research Assistant to Dr. Josh Angrist, MIT Economics Department

05/2020 - 12/2020

- Pulled, cleaned, and visualized COVID mortality data from the CDC to analyze geographic disparity in mortality trends.
- Interfaced with research partners in state government to gather data on school enrollment for a project on school integration.

TEACHING EXPERIENCE

Teaching Assistant, Econometrics, MIT Economics Department

08/2020 - 05/2021

- Taught sections on the use of Stata for econometric analysis to undergraduate and master's students.
- Led office hours to help students understand econometric theory and applications.
- Graded student problem sets with both theoretical and Stata-programming components.

PROFESSIONAL EXPERIENCE

- Reviewed established data processing scripts and drafted a description of the processing to be submitted in a high-profile financial industry court filing.
- Used cross-validation model selection techniques to establish credible counterfactual scenarios in mock case environment.

SKILLS & INTERESTS

Technical Skills

- Statistical Packages: Extensive experience with Stata, including development of customized statistical routines; some familiarity with R.
- Languages: Python (including pandas, matplotlib, sklearn, and statsmodels), some familiarity with Julia.
- Applications: LATEX, Excel, Git and Github
- Operating Systems: Unix/Linux, Windows

Other Interests

• Running, cycling, cooking, live music