NATHAN MATHER

PHD ECONOMIST

CONTACT

608-774-7648
njmather@umich.edu
NathanMather.com

1181 Kay Pkwy,
Ann Arbor, MI 48103

EDUCATION

2017-Present
PhD Candidate in Economics
University of Michigan - Ann Arbor
    Public Finance
    Labor Economics

2019
Masters in Economics
University of Michigan - Ann Arbor

2016
Bachelor of Arts
University of Wisconsin - Madison
    Economics (Honors)
    Mathematics
    Political Science

SKILLS

||| SOFTWARE

Expert: R (data.table, tidyverse, etc), Stata

Proficient: Github, Latex

Familiar: Python, Matlab, Julia, C++

Other: Unreal Engine, Premier Pro, Audition

||| PERSONAL SKILLS

Causal Inference, Economic Modeling, Process Automation, Team Collaboration, Interactive Data Visualization, Public Speaking, Web Scraping

PROFILE

During my time as a PhD candidate in economics, I have built on and solidified fundamental skills that are invaluable to a challenging and fast paced analytic career. For example, I tackle difficult questions by finding new innovative solutions. Measuring utility is a task that has long eluded economists and cannot be solved with analytical rigor alone. By approaching this question in a new way, I can estimate the concavity of utility using a simple model and survey data. In another project I improve analytic techniques to better meet the specific goals of decision makers. I show how measuring heterogeneity, rather than just mean outcomes, leads to better outcomes via comparative advantage and allows decision makers to better match policies to their specific goals. Throughout all my projects, a crucial skill I have mastered is the ability to independently learn what I need for the task at hand, whatever that may be.

EXPERIENCE

2017-Present
PHD CANDIDATE
University of Michigan- Ann Arbor

- Acquired training in causal inference, statistics, public finance, industrial organization estimation techniques, and economic modeling
- Perfected public speaking and communication in formal seminars
- Experienced with acquiring grants and running surveys
- Worked independently to solve complex problems

2016- 2017
RESEARCH ANALYST
Education Analytics - Madison Wisconsin

- Mastered R programming for data cleaning, analysis and visualization
- Developed best practices for cooperation among team members
- Gained task automation experience
- Contributed to in-house packages and tools

2018 - 2020
RESEARCH ASSISTANT
Education Policy Initiative (Brian Jacob) - University of Michigan

- Mastered data manipulation using Stata
- Improved yearly data intake using process automation
- Created R training materials

2018-2022
GRADUATE STUDENT INSTRUCTOR
University of Michigan- Ann Arbor

- Trained students in complex quantitative methods
- Communicated complex ideas using simple intuition and examples
- Presented lengthy readings and research using manageable key ideas
- Improved my own writing through grading student work

NATHAN MATHER

PHD ECONOMIST

LETTER WRITERS

James R. Hines Jr.
Professor of Economics
University of Michigan
econ-phdplacements@umich.edu
Dissertation committee chair

Ashley Craig
Assistant Professor of Economics
University of Michigan
econ-phdplacements@umich.edu
Dissertation committee member

Julian Betts
Professor of Economics
University of California San Diego
econ-phdplacements@umich.edu
coauthor

Jim Adams
Professor of Economics
University of Michigan
econ-phdplacements@umich.edu
Teaching Reference

RESEARCH PROJECTS

Is Utility Concave? (Job Market Paper)

- Focus on measuring, comparing, and understanding what people value and how they make decisions
- Ran a survey eliciting willingness to pay using multiple strategies
- Utilize binary choice logit modeling to estimate willingness to pay
- Analyze how willingness to pay changes across characteristics
- Use maximum likelihood to estimate structural model of consumer choices

From Value Added to Welfare Added: A Social Planner Approach to Education Policy and Statistics (With Julian Betts, Tanner S Eastmond, and Michael Ricks)

- Use Monte Carlo simulation to test validity of empirical approach
- Worked with district leaders to access San Diego Unified School District data
- Use economic theory to show when and why measuring heterogeneity matters
- Map out a set of possible policy choices corresponding to specific goals rather than simply increasing average outcomes

I'll Have What They're Having: State Fiscal Policy Interdependence

- Use web scraping to create a new measure of state interconnectivity
- Use geospatial data to create maps to visualize state interconnectivity
- Created an interactive data appendix to allow readers to fully explore results
- Use economic theory to show when and why hypothesis will hold