Xiaonan (Steve) Ma

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Summary

Experienced in large-scale data analysis with programming and statistical modeling.
Ability to share results with a variety of audiences and advance multiple projects at once on a tight schedule.
Advanced verbal and written communication skills, in both Mandarin Chinese and English.

Education

Ph.D., Econometrics and Quantitative Economics, *University of Rochester* 2019 – present
- **Research Fields:** Macroeconomics, Labor Economics, Search and Matching, Household Finance

Master, Economics, *Tsinghua University (Top 2 in China)* 2016 – 2019

BA, Economics, *Peking University (Top 2 in China)* 2013 – 2016

BA, Management Information System, *Beijing Technology and Business University* 2011 – 2015

Skills

Programming Language: Python, Julia, MATLAB, Stata, R, SAS, SQL, LaTeX.
Scientific Computing: Dynamic Programming, Nonlinear Optimization, Parallel Computing.
Data Science: Large-scale Datasets, Causal Inference, Time Series, Machine Learning, Statistical Modeling.

Experience

Special Sworn Status Principal Investigator (PI), US Census Bureau December 2022 – Present
- Extract, organize, and analyze large-scale data sets from individuals and firms using SAS/Stata/MATLAB.
- Estimate the effect of worker/firm choice in labor market using econometric methods.
- Computationally simulate, calibrate, and estimate a dynamic model using Julia and MATLAB.

Instructor, University of Rochester May 2022 – June 2022
- Teaching a summer course - Intermediate Macroeconomics.

Research Assistant, University of Rochester 2021 - Present
- Help construct, simulate, and solve heterogeneous agent models with tail risk.
- Estimate the power and robustness of the model using Monte Carlo simulation.

Teaching Assistant, University of Rochester 2021 - 2024
- Recitation/lectures and grading for undergraduates/MBAs on statistics, econometrics, macroeconomics.

Selected Working Papers

Earnings Dynamics, Transitions, and Stepping-stone Employers [Link]
- Empirical evidence of earnings dynamics upon job transitions using large panel data.
- Identify motivations for transitions by linking survey data with matched employer-employee panel.
- Estimate the role of firms as stepping-stones for workers with a dynamic search model.

A Simple Search Model with Employer Network [Link]
- Construct, solve and simulate a search model with employer network structure using Julia/MATLAB.

Human Capital, Job Ladders, and Life-Cycle Labor Supply, with Paulo Lins
- Provide new facts about the behavior of total annual hours over the life cycle using NLSY79 data.
- Propose a new model that nests different theories to explain the our empirics about hours profile.

Selected Fellowships & Awards

- Professional Development Funding, University of Rochester, 2024
- Conibear Prize for the best third-year paper, University of Rochester, 2022
- McKenzie Fellowship, University of Rochester, 2019-2024
- Tachiki Graduate Scholarship, Tsinghua University, 2017, 2018