

Bailey Johnson

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bailey-johnson.com

EDUCATION

UCLA

2019 - 2026

Economics PhD all but dissertation.
Economics MA received 2021

Michigan State University

2018

BS Economics, Math minor. Highest Honors

EXPERIENCE

UCLA — Lecturer

Summer 2023

I taught and made the instructional materials for the introductory finance course, including pricing of stocks, bonds, and derivatives. Portfolio theory and market efficiency.

UCLA — Teaching Assistant

2020 - 2024

Taught a supplementary lecture and in so doing made instructional materials and problem sets for better student understanding. This includes the following courses: Macroeconomic Theory, Finance, Microeconomic Theory 1 & 2, Financial Markets and Financial Institutions, Pricing and strategy.

UCLA — Readership

2020 - 2025

This includes grading tests, homework, essays, and student projects for the following courses: Principles of Macroeconomics, Principles of Microeconomics, Macroeconomic Theory, Advanced in Macroeconomics: Growth, Designed Markets, International Finance, History of Capitalism in the American Economy

Michigan State Finance Department — Research Assistant

April - December 2018

Wrote up detailed proofs for and computed the maximum likelihood estimator used that was trying to use a measure to separate skill from luck of mutual funds. In a separate project I collected and cleaned data for over 1000 cryptocurrencies for a similar analysis to Jermann's 2018 hyperinflation paper which was previously restricted to Bitcoin.

SKILLS

Python, Matlab, Stata, R, Latex, Office, some AI assisted programming

AWARDS / Positions

Graduate Student Fellowship

UCLA 2019 - 2024

Graduate Economics Association Social Chair

UCLA 2021

Terry L Schlichter Award

Michigan State University
Economics Department 2018

George F. McGregor Scholarship

Michigan State University 2016-2018

LANGUAGES

English (Native)

French (Around B2 / Limited
Working Proficiency)

Working Papers/Projects

Heterogeneous Effects of Factor Intensity on Creative Destruction

Analyzed recession effects on productivity following recessions using Compustat data among various industries. Developed a modified firm dynamics model incorporating heterogeneous factor insensitivity and varied choices of debt contract options to try to better follow patterns in factor usage, net firm exits, and productivity transitions, including delayed effects.

Optimal Trading with Sandwich Attack Front-Running in Decentralized Exchanges

Everyday traders are using decentralized exchanges that operate on blockchains with smart contracts to swap cryptocurrencies. Due to the mechanism that decides trades submitted to these blockchains there exists a problem called Miner Extractable Value (MEV) which includes frontrunning users by paying additional fees to the blockchain's miners to receive favorable trade sequencing. This paper uses a basic dynamic trading game to find an implementable way of reducing this front-running. The user would be submitting multiple trades that are sufficiently small to make the fixed per trade transaction costs of using the blockchain would outweigh potential frontrunning profits.

