Jared Dean Katz

1221 24th St NW, APT 207 • Washington, DC 20037 • jareddeankatz@gmail.com • (609)619-1771

Education

Vanderbilt University Nashville, TN
Highest Honors in Economics and Mathematics. GPA: 3.97 Spring 2023
Awards:

- Summa Cum Laude
- Phi Beta Kappa
- Highest Honors in Economics
- T. Aldrich Finnegan Award for Best Economics Undergraduate Thesis (top student annually)
- Joel Tellinghuesen Phi Beta Kappa Award for Undergraduate Excellence in Research at Vanderbilt (5 students annually)

Research Interests: Innovation and growth. Adaptation to technology. Labor markets.

Relevant Coursework: Math: Multivariable Calculus, Linear Algebra, Differential Equations, Real Analysis, Graph Theory, (Math) Probability and Statistics I, (Math) Probability II, Mathematical Data Science, Real Analysis, Real Analysis II (Johns Hopkins) **Technical:** Intro to Programming, Program Design and Data Structures, Modeling and Simulation, How to Build (almost) Anything and Make it Matter **Econ:** Microeconomics, Macroeconomics, Econometrics, Social Choice Theory, Microeconomic Policy Seminar, Topics in Econometrics: Environmental Econ, U.S Econ History, European Econ History

Research Experience

Board of Governors of the Federal Reserve Washington, DC
Senior Research Assistant– Monetary and Financial Market Analysis May 2023 – Present

- Co-authored research paper on the dynamics underlying stock-bond correlation, which has important implications for portfolio risk management and financial stability.
- Co-authored research paper on macroeconomic effects and the term structure of uncertainty, which has important implications on optimal policy responses in an increasingly uncertain world.
- Support FOMC policy decisions by creating charts and assisting analysis for important internal and public-facing policy documents such as Tealbook A, Tealbook B, QS/FSR, and briefings for Governors of the Board.
- Principal RA of mission-critical productions to the Fed, namely internal treasury yield databases and the public-facing Fed Benchmark Yield Curve.

Summer Research Assistant– Monetary and Financial Market Analysis May 2022 – Aug 2022

- Worked alongside Fed economists to better understand NLP tools and their application to economics, with specific applications to monetary policy communications and environmental economics.

Vanderbilt University Nashville, TN
Research Assistant– Professor Ariell Zimran Dec 2020 – May 2022

- Created an OCR script in Python to transcribe and format a variety of economic history data, developing a tool to save dozens of future hours on data transcription for the project
- Cleaned, visualized data on congressional voting on immigration to explain the end of the Age of Mass Migration

Teaching Experience

Grading Assistant- Professor Leonardo Abbrescia Aug 2022 – Dec 2022

- Grader for MATH 2610 Ordinary Differential Equations.
- Created answer keys and graded weekly homework assignments, provided students with detailed feedback about where they made errors.

Works in Progress

Macroeconomic impact of uncertainty Coauthor with Marcelo Ochoa to deconstruct the impact of financial market uncertainty on economic growth. Work in progress...

Macroeconomic news and the stock-bond correlation Coauthor with Canlin Li and Marius Rodriguez to understand how macroeconomic news releases explain the stock-bond correlation (which tells us about the balance of growth and inflation prospects). Draft coming soon...

Research Papers

The Emotional and Cognitive Impacts of Air Pollution: Evidence from Twitter May 2023

Abstract: I study whether heightened air pollution leads to emotional and cognitive responses at the infra-marginal level. To address this question, I employ geolocated, times-tamped Twitter microdata. Using an original dataset of over 30 million unique Tweets, I observe linguistic responses to varying levels of pollution across the U.S.. I find that Tweets from higher-pollution backgrounds are more negative and aggressive than Tweets from observably similar backgrounds with less pollution. Additionally, I find evidence that higher-pollution Tweets score cognitively lower for some groups, but otherwise have little to no effect. I find that lower cognitive-scoring users Tweet less as air quality worsens, but individual users Tweet at a lower level. I also find that originally negative and cognitively low-scoring Tweets are more vulnerable to air pollution's negative effects than high-scoring Tweets.

- Presented at Georgetown University (Carroll Round Conference), Vanderbilt University (Honors thesis)
- Awarded highest honors in economics at Vanderbilt University
- Winner of Alrdich Finnegan Prize for best undergraduate economics thesis
- Winner of Joel Tellingheuser Prize for outstanding undergraduate accomplishments in research at Vanderbilt University

Openness to Change and Imposed Reform Outcomes in Higher Education May 2022

Abstract: Theory suggests that the implementation of diversity policies in education can have mixed effects for student outcomes, depending on the openness of the reformed institution to the new policy. In this paper, I identify and exploit a novel environment to study this effect: individual college resistance to the Oxford Reform Act of 1854, an act imposed by Parliament forcing sweeping structural changes to the equity and inclusion of Oxford colleges. I use historical records to identify colleges which were more open to the Act's reforms, then measure the changes in academic success using proportion of the college's graduates who receive University-wide honors. After the reforms, I find that colleges that were more open-minded to the Act gained academic success relative to more resistance colleges.

- Independent research under Ariell Zimran

Skills & Interests

Technical: Strong: R, Python, LaTeX, Linux. Experienced: Matlab, SQL, FAME, C++.
Other Interests: Volleyball (Captain of Club Volleyball D2 AA National Champions), Constructing crossword puzzles, (Electric) Guitar, Spikeball, Biographies.