

JACK COLLISON

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PO Box 12680 531 Lasuen Mall, Stanford, CA 94309

EDUCATION

University of Wisconsin-Madison

Madison, WI

Ph.D. Student in Economics

TBA

Relevant Coursework: microeconomics, macroeconomics, econometrics, mathematical economics

Stanford University

Stanford, CA

Master of Science in Statistics

Expected 2021

Relevant Coursework: probability theory, statistical inference, matrix theory, real analysis, time series, applied statistics, statistical learning, machine learning, causal inference

Stanford University

Stanford, CA

Bachelor of Arts in Economics with Honors

June 2020

Honors Thesis: “The Impact of Online Food Delivery Services on Restaurant Sales”

Advisor: Liran Einav

Relevant Coursework: microeconomics, macroeconomics, econometrics, market design, programming abstractions, multivariable calculus, linear algebra

GRANTS AND AWARDS

Anna Laura Myers Prize for Outstanding Honors Thesis

Stanford University, 2020

Economics Departmental Honors

Stanford University, 2020

Department of Economics Summer Research Grant

Stanford University, 2018

National Merit Finalist

College Board, 2016

AP Scholar with Distinction

College Board, 2016

International Science and Engineering Fair Finalist

Intel, 2014, 2015

PUBLISHED AND FORTHCOMING PAPERS

1. “A survey of southern hemisphere meteor showers,” with Peter Jenniskens, et al. *Journal of Planetary and Space Science*, 154, May 2018, 21-29.
2. “Artificial Intelligence Techniques applied to Automating Meteor Validation and Trajectory Quality Control to Direct the Search for Long Period Comets,” with Marcelo De Cicco, et al. *Proceedings of the International Meteor Conference*, September 2017.
3. “Searching for Long-Period Comets with Deep Learning Tools,” with Susana Zoghbi, et al. *Neural Information Processing Systems: Deep Learning for Physical Sciences*, December 2017.

PAPERS UNDER REVIEW

1. “The Impact of Online Food Delivery Services on Restaurant Sales,” revise and resubmit, *International Journal of Industrial Organization*.
2. “Trends in Hospital Prices for the Publicly and Privately Insured, 2009-15,” with Toren Frons-dal.

RESEARCH EXPERIENCE

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|---|---|
| Stanford University Department of Economics <u>Independent Researcher</u> | May 2019 - Current <u>Stanford, CA</u> |
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Conduct economics research using big data. Quantified crowding-out effects induced by online food delivery services and examined differential trends in hospital prices. Current interests include competition in e-commerce and mergers in insurance markets.

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| Stanford University Freeman Spogli Institute <u>Research Assistant</u> | February 2021 - Current <u>Stanford, CA (<i>Remote</i>)</u> |
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Examining the extent to which diabetes care is foregone due to COVID-19 using patient-level claims and prescription data. Also working on a project studying care-seeking in India using a similar database. Working with Professors Karen Eggleston and Jay Bhattacharya.

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| Stanford University Department of Economics <u>Research Assistant</u> | October 2017 - May 2019 <u>Stanford, CA</u> |
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Analyzed credit card data from Visa Inc. on the universe of retail outlets in the U.S. accepting Visa credit and debit cards. Developed a comprehensive dataset on retail establishment location, entry, exit and card transactions for understanding offline and online competition and growth. Worked with Professors Liran Einav and Pete Klenow.

EXPERIENCE

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| Stanford University Department of Statistics <u>Course Staff</u> | January 2021 - Current <u>Stanford, CA (<i>Remote</i>)</u> |
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Responsible for grading problem sets and exams for an advanced undergraduate statistics course (STATS 191: Introduction to Applied Statistics).

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| Ellington Management Group <u>Research Analyst Intern</u> | September 2020 - December 2020 <u>Old Greenwich, CT (<i>Remote</i>)</u> |
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Projects include creating new models to assess risk with various optimization techniques and modifying existing models for better performance.

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| QuantCo <u>Quantitative Research Intern</u> | June 2020 - September 2020 <u>Berlin, Germany (<i>Remote</i>)</u> |
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Responsibilities included developing and implementing algorithms to drive important business decisions. Projects included identification of harmful drug interactions and construction of a novel deep learning framework for surgical prediction.

Stanford University Department of Statistics
Course Staff

April 2020 - June 2020
Stanford, CA (*Remote*)

Responsible for grading problem sets for about 200 undergraduate students in an introductory statistics course (STATS 60: Introduction to Statistical Methods).

Ellington Management Group
Research Analyst Intern

June 2019 - September 2019
Old Greenwich, CT

Analyzed large datasets, formulated statistical models, and assisted in executing trades with ad hoc analysis. Responsible for the creation of new datasets and statistical models on opaque products and markets.

NASA Frontier Development Lab
Research Intern

June 2017 - August 2017
Mountain View, CA

Automated the process of tracking and analyzing meteor showers associated with long period comets. Deep learning was used for false positive discrimination. Additionally, wrote a policy brief to NASA Headquarters on investment in artificial intelligence techniques.

LEADERSHIP

Stanford Statistics for Social Good
Co-Chair, Researcher

February 2017 - Current
Stanford, CA

Chair of working research group of graduate students that analyzes complex social problems. Responsibilities include organizing panels, events, projects, and meetings, as well as conducting statistical analysis.

Stanford Code the Change
Web Developer

September 2016 - June 2017
Stanford, CA

Helped design and create a website for CultureMesh, a nonprofit social networking platform that connects refugees.

SKILLS

Programming: Python, R, SQL, C++, Stata, Java, HTML, CSS, Javascript