

# Jett Pettus

Updated October 2023 ◊ [jvpettus@mit.edu](mailto:jvpettus@mit.edu) ◊ [jettpettus@gmail.com](mailto:jettpettus@gmail.com) ◊ (619)-517-7729

## Education

---

- Massachusetts Institute of Technology** Fall 2021 -  
Ph.D. Economics, NSF Graduate Research Fellow
- Columbia University** Fall 2018 and Spring 2020  
Courses in Stochastic Processes (*Masters*) and Statistical Inference, GPA: 4.0/4.0
- University of California, Santa Cruz** September 2015 - June 2018  
B.A. in Economics/Mathematics (highest honors), *Summa Cum Laude*  
Rank among Economics graduates: 1/453, GPA: 3.98/4.0
- Santana High School** June 2015  
Valedictorian

## Working Papers

---

**“Communication and Bargaining Breakdown: An Empirical Analysis”**  
with Matthew Backus, Thomas Blake, and Steven Tadelis. *Management Science* (Accepted July 2023).  
*ACM:EC'21* extended abstract.

Bargaining breakdown—whether as delay, conflict, or missing trade—plagues bargaining in environments with incomplete information. Can a bargaining environment that facilitates or restricts communication alleviate these costs? We exploit a unique opportunity to study this question using real market transactions: eBay Germany’s Best Offer platform. On May 23, 2016, the platform introduced unstructured communication allowing buyers and sellers on the desktop version of the site, but not the mobile app, to accompany price offers with a message. Using this natural experiment, our difference-in-differences approach documents a 14% decrease in the the rate of breakdown among compliers. Though adoption is immediate, the effect is not. We show, using text analysis, that the dynamics are consistent with repeat players learning how to use communication in bargaining, and that the messaging strategies of experienced sellers are correlated with successful bargaining.

## Works in Progress

---

“Consumer Surplus and Distribution” with Matthew Backus

## Research Experience

---

- Massachusetts Institute of Technology** January 2022 - August 2022 (on and off)  
Research Assistant for Professor Nikhil Agarwal
- I worked for Professors Nikhil Agarwal and Tobias Salz on their new working paper “Combining Human Expertise with Artificial Intelligence: Experimental Evidence from Radiology.” Using an experiment, the paper asks how to optimally incorporate machine learning algorithms for chest x-rays with radiologist readings—keeping in mind potential behavioral biases that might arise
- National Bureau of Economic Research** July 2020 - July 2021  
Research Assistant for Professor Matthew Backus
- Role primarily consists of developing a novel dataset of judicial text to be used in a number of research papers, writing structural hypothesis testing code in Python and R, and implementing machine learning and natural language processing techniques to analyze text in Python
- Columbia Business School** July 2018 - July 2020  
Microeconomics Research Assistant

- Projects for Professors Charles Angelucci, Matthew Backus, Ann Bartel, Jonas Hjort, Amit Khandelwal, Frank Lichtenberg, Christian Moser, Andrea Prat, Nachum Sicherman, and Ashley Swanson
- All kinds of projects and research methods including: developing identification techniques, text recognition in MATLAB, extensive data cleaning for datasets with over 200 million observations in STATA, running lasso regressions and outputting US maps in R, and natural language processing in Python

**Income Dynamics Lab (UC Santa Cruz)**

January 2017 - June 2018

Research Assistant for Professor Ajay Shenoy

- Compiled lobbying data from OpenSecrets and US government-run sites using web-data extraction techniques in Python, prepared literature reviews

**Fellowships/Grants**

---

**George and Obie Shultz Fund at MIT** – \$8,000

February 2023

“A Production-Function Approach to Measuring Prison Quality”

**Alfred P. Sloan Foundation Grant, G-2021-16988** – \$357,127

January 2022 - December 2024

“Consumer Surplus and Distributional Concerns” with Matthew Backus

**National Science Foundation Graduate Research Fellowship** – \$138,000

September 2021 - 2024

**New York University/Schmidt Futures** – \$5,000

September 2019 - June 2020

Computation in Economics Fellowship

**Teaching Appointments**

---

**Teaching Assistant – Industrial Organization I (14.271)**

Fall 2023

Massachusetts Institute of Technology

**Teaching Assistant – Introduction to Python**

Spring 2023

MCI Framingham Prison and Maine Correctional Women’s Center through MIT’s Educational Justice Institute

**Teaching Assistant – Introduction to Macroeconomics**

Fall 2016

University of California, Santa Cruz

**Service**

---

**Women in Economics Leadership**

Fall 2023

Massachusetts Institute of Technology