Nadav Tadelis

About Me

I'm a 5th year Economics PhD candidate focusing on industrial organization and econometrics, with specific interests in learning-by-doing, productivity dynamics, matching markets, dynamic auctions, causal machine learning, and heterogeneous treatment effects in high dimensional settings.

Education

PhD in Economics 2020 - Current
University of California Berkeley

BA in Statistics, *Honors* 2014 - 2018
BS in Environmental and Economics Policy 2014 - 2018
University of California Berkeley

Skills/Qualifications

Programming Languages: Python, SQL, Julia, R

Languages: English (native), Hebrew (proficient), Spanish (proficient)

Research Manuscripts

"Experiential Learning in Knowledge Workers: Individual Mastery, Product Spillovers, and Collaborative Synergies", working paper, 2024

"Learning to Bid in Dynamic Auctions with Asymmetric Information", In Progress

"Adaptive Estimation for Nonparametric Treatments in Double Machine Learning", In Progress (Joint with Manu Navjeevan)

"Solutions for Congestion in Matching Markets", In Progress (Joint with Andrew Tai)

Experience

Principal Economist/ML Researcher (Part Time Consultant) Plumber.ai January 2024 - Current

(Seed-level Startup) Developed data science and economic tools for the core products, from ideation to production. Created and implemented flagship user facing metrics for tracking technician productivity and optimal task assignment. Collaborated closely with engineers, connected models to backend infra and client facing LLM's.

PhD Research Economist Intern Flexport February 2023 - October 2023

Built internal pricing and productivity models. Created big data (7TB+) Snowflake (SQL) to Python pipelines. Worked closely with economists, data scientists, SWE's, and account managers to create customized ML and causal models.

Research Intern Microsoft Research (ALICE) May 2022 - August 2022

Research conducted in the Automated Learning and Intelligence for Causation and Economics lab. Focused on developing adaptive extensions to the canonical double ML procedures which allow for nonlinear treatment effects with unknown functional forms. Goals included proving convergence and inference results, as well as adding the developed methods to the EconML codebase.

Graduate Student Instructor (Teaching Assistant) UC Berkeley August 2021 - May 2024

Teaching undergraduate economics courses (Game Theory, Intermediate Microeconomics, Industrial Organization, Econometrics).

Full Time Research Assistant (Pre-Doc) UC Berkeley September 2018 - February 2021

Conducted research for professors Ben Handel and Jon Kolstad. Focused primarily on analyzing the effectiveness of changes to a health insurer's payment plans for physicians, working with All-Payer Claims Databases (APCD).

Economic Consultant Auctionomics January 2019 - March 2019

Economic consultant and researcher for Auctionomics - details under NDA.

Global Intern - Algorithms Lab / Data Mining Hyundai (Seoul) June 2017 - August 2017

Analyzed and refined a graph-theoretic approach to quality control of crowdsourced data. Combined different crowdsourcing techniques to create a platform that yields higher quality data while minimizing the number of tasks.

Part Time Research Assistant UC Berkeley August 2016 - April 2017

Research assistant for Professor Jonathan Kolstad. Built a wrapper in R to streamline the creation of "Honest Trees" as described in "Recursive Partitioning for Heterogenous Causal Effects" (Athey & Imbens, 2015). Focused on health data and creating interpretable estimations of heterogeneous treatment effects in big data settings.

Data and Policy Analyst Acumen LLC May - August 2016

Responsibilities included providing analytical support for research and consulting projects for government and private clients, in the area of health policy. Performing data management and statistical analysis; and researching and interpreting policy. Specific project involved research for the Center for Medicare & Medicaid Services (CMS).