

Contact

www.linkedin.com/in/robert-donnelly-4376579 (LinkedIn)

Top Skills

Causal Inference
Machine Learning
Higher Education

Publications

Counterfactual Inference for
Consumer Choice Across Many
Product Categories
Welfare Effects of Personalized
Rankings
Estimating Heterogeneous
Consumer Preferences for
Restaurants and Travel Time

Robert Donnelly

Machine Learning Scientist at Arena AI
Brooklyn, New York, United States

Experience

Arena

Machine Learning Scientist
May 2022 - Present (1 year)
New York, New York, United States

Sphere

Instructor: Causal Inference
November 2022 - Present (6 months)

12 hour online course focused on applications of causal inference. Techniques covered in the class include matching, propensity scores, synthetic controls, doubly robust estimators, heterogeneous treatment effects, and double ML.

Instacart

Senior Economist
December 2020 - May 2022 (1 year 6 months)
San Francisco Bay Area

Facebook

Economics Research Scientist
June 2019 - December 2020 (1 year 7 months)
Menlo Park

Stanford Graduate School of Business

Economics PhD
September 2014 - June 2019 (4 years 10 months)

Microsoft

Empirical Economics Research Assistant / AdCenter Ranking and Relevance PM
June 2012 - July 2014 (2 years 2 months)
Greater Boston Area

Estimated theory-based empirical model of advertiser behavior in online search ad auctions to infer advertiser preferences and predict their responses to changes in the platform.

Analyzed the effects of search result quality on user behavior using causal random forests.

Cornerstone Research

Senior Analyst

September 2009 - May 2012 (2 years 9 months)

Boston

- Worked on wide variety of economic and financial cases in a fast-paced environment.
- Examined reimbursement rates, outcome quality, and market structure to evaluate the degree of market power of a specialty physician group that used exclusive contracts with hospitals.
- Estimated value of complex currency options with Monte-Carlo simulation.
- Created a process to automatically download and parse information on securities class action settlements for an internal database. Updated model used to predict settlement amount based case characteristics.

Education

Stanford University Graduate School of Business

Doctor of Philosophy (PhD), Economic Analysis and Policy · (2014 - 2019)

Harvard University

· (2013 - 2013)

Pomona College

BA, major in Mathematics, with minors in Economics and Computer Science · (2005 - 2009)