Andrey Fradkin

Last Updated: November 16, 2025

CONTACT INFORMATION

Questrom School of Business
595 Commonwealth Ave,
Boston, MA, 02215, United States

Voice: (201) 921-6279
E-mail: fradkin@bu.edu
Web: `www.andreyfradkin.com`
Google Scholar: `goo.gl/pTiQBU`

ACADEMIC POSITIONS

Summer 2025 - ongoing: Associate Professor with tenure, Boston University Questrom School of Business
Summer 2018 - ongoing: Assistant Professor and Dean's Research Scholar, Boston University Questrom School of Business
December 2023 - ongoing: Affiliated Faculty at the Economics Department, Boston University
Fall 2018 - ongoing: Research Affiliate, MIT Initiative on the Digital Economy
Summer 2020 - Summer 2023: Hariri Institute for Data Science Junior Fellow
2015 - 2018: Postdoctoral Associate, MIT Sloan School of Management
2014 - 2015: Postdoctoral Fellow, National Bureau of Economic Research

OTHER POSITIONS

August 2025 - Present: Principal Economist, Amazon
December 2023 - August 2025: Data Science Consulting at Indeed and Lineage Logistics.
April 2022 - March 2024: Contractor at Pro Unlimited at Meta. (Research Collaboration)
Winter 2019 - Winter 2021: Contractor at Pro Unlimited at Meta. (Research Collaboration)
2012 - 2016: Data Science at Airbnb.

VISITS

Fall 2022 - Kilts Center Visiting Fellow at U. Chicago Booth
Fall 2022 - Berkeley Haas School of Business

EDUCATION

Stanford University, Stanford, California — September, 2008 - June, 2014
Ph.D. in Economics

Duke University, Durham, North Carolina — August, 2004 - May, 2008
B.S. with High Distinction in Economics and Mathematics w/ minor in Political Science

RESEARCH FIELDS

Economics of AI, Quantitative Marketing, Industrial Organization, Economics of Marketplaces, Labor Economics

PUBLICATIONS[1]

Competition Avoidance vs Herding in Job Search: Evidence from Large-scale Field Experiments on an Online Job Board (Andrey Fradkin,* Monica Bhole and John Horton)
Management Science (Forthcoming)
Job seekers typically do not know the degree of competition they face for a particular vacancy. As a result, they may unwittingly send applications to jobs with a lot of competition and may overlook jobs with little competition. We study how providing information about competition for a vacancy redirects applications. To do so, we conduct three field experiments on a large online job platform in which treated job searchers are shown information about the number of prior applicants to a vacancy. This information increases overall applications and redirects applications to jobs with few prior applications. Applications are sent to vacancies that receive fewer cumulative applications but result in similar outcomes to control applications. We use a complementary treatment to show that job seekers also use the age of the vacancy to direct search towards newer jobs with relatively little competition. Our results are consistent with a model in which searchers have imperfect information about competition for a vacancy and redirect their search towards less competitive vacancies when they receive an improved signal.

Consumer Protection in an Online World: An Analysis of Occupational Licensing
(Chiara Farronato*, Andrey Fradkin*, Brad Larsen*, and Erik Brynjolfsson)
AEJ: Applied Economics (July 2024)
We study the effects of occupational licensing on consumer choices and market outcomes in a large online platform for home improvement services. Exploiting exogenous variation in the time licenses are displayed on the platform, we find that platform verified licensing status is unimportant for consumer decisions relative to review ratings and prices. We confirm this result in an independent consumer survey. Licensing restrictions differ widely by state, and persist despite the growing potential of online reputation to reduce information asymmetries. More stringent regulations are associated with less competition, higher prices, and no improvement in consumer satisfaction for transactions on the platform.

Dog Eat Dog: Balancing Network Effects and Differentiation in a Digital Platform Merger (with Chiara Farronato and Jessica Fong)
Management Science (January 2024)
Mergers among digital platforms are increasingly receiving public and regulatory attention. These mergers may benefit users if network effects from a combined platform are large enough or may hurt users if the two platforms are differentiated and one of the platforms is shut down. We study the net effect of this trade-off in the context of the merger between the two largest platforms for pet-sitting services. We exploit geographic variation in pre-merger market shares and a difference-in-differences approach to causally estimate network effects. We find that users of the acquiring platform benefited from the merger because of network effects. However, users of the acquired platform were more likely to exit the market, for reasons including switching costs, coordination failures, and disintermediation. Network effects and attrition offset each other such that at the market level consumers are, on average, not substantially better off with a single combined platform than with two separate and competing platforms. Our results highlight the importance of platform differentiation even when platforms enjoy network effects, which has important implications for antitrust authorities and platform owners.

Do Incentives to Review Help the Market? Evidence from a Field Experiment on Airbnb (Andrey Fradkin* and David Holtz)
Marketing Science (October 2023)
Online reviews are typically written by volunteers and, as a consequence, information about seller quality may be under-provided in digital marketplaces. We study the extent of this under-provision in a large-scale randomized experiment conducted by Airbnb. In this experiment, buyers are offered a coupon to review listings that have no prior reviews. The treatment induces additional reviews and these reviews tend to be more negative than reviews in the control group, consistent with selection bias in reviewing. Reviews induced by the treatment result in a temporary increase in transactions but these transactions are for fewer nights, on average. The effects on transactions and nights per transaction cancel out so that there is no detectable effect on total nights sold and revenue. Measures of transaction quality in the treatment group fall, suggesting that incentivized reviews do not improve matching. We show how market conditions and the design of the reputation system can explain our findings.

Self-Preferencing at Amazon: Evidence from Search Rankings
(Chiara Farronato, Andrey Fradkin, Alexander MacKay)
AEA Papers & Proceedings (May 2023)
We study whether Amazon branded products are indeed ranked higher than observably similar products in consumer searches. To show this self-preferencing, we collect new micro-level consumer search data using a custom browser extension installed by a panel of participants we recruited. Using this methodology, we observe search positions, search behavior, and product characteristics. This allows us to evaluate whether Amazon's product are ranked higher in search holding other factors constant.

The Welfare Effects of Peer Entry in the Accommodations Market: The Case of Airbnb (with Chiara Farronato)
American Economic Review, Volume 112, Issue 6, 2022: 1782-1817
We study the effects of enabling peer supply through Airbnb in the accommodation industry. We present a model of competition between flexible and dedicated sellers - peer hosts and hotels - who provide differentiated products. We estimate this model using data from major US cities and quantify the welfare effects of Airbnb on travelers, hosts, and hotels. The welfare gains are concentrated in locations (New York) and times (New Year's) when hotels are capacity constrained. This occurs because peer hosts are responsive to market conditions, expand supply as hotels fill up, and keep hotel prices down as a result.

Reciprocity and Unveiling in Two-sided Reputation Systems: Evidence from an Experiment on Airbnb (Andrey Fradkin*, Elena Grewal, and David Holtz)
Marketing Science, Volume 40, Issue 6, 2021: 1009-1216
Reputation systems are used by nearly every digital marketplace, but designs vary and the effects of these designs are not well understood. We use a large-scale experiment on Airbnb to study the causal effects of one particular design choice the timing with which feedback by one user about another is revealed on the platform. Feedback was hidden until both parties submitted a review in the treatment group and was revealed immediately after submission in the control group. The treatment stimulated more reviewing in total. This is due to users' curiosity about what their counterparty wrote and/or the desire to have feedback visible to other users. We also show that the treatment reduced retaliation and reciprocation in feedback and led to lower ratings as a result. The effects of the policy on feedback did not translate into reduced adverse selection on the platform.

Blame the Parents? How Parental Unemployment Affects Labor Supply and Job Quality for Young Adults (with Frederic Panier and Ilan Tojerow)
Journal of Labor Economics, Volume 37, Issue 1, 2019: 35-100.
We study the role of shocks to parental income in determining the labor market outcomes of children entering the labor market. We find that a child whose parent loses a job prior to the child's labor market entry is, on average, induced to work 9 percent more in the 3 years following labor market entry than a child whose parents lose a job after the child's entry. This effect is concentrated on the extensive margin and decreases in magnitude over time. We find no evidence that these shocks affect the quality of the job that entrants find.

The Impact of Unemployment Insurance on Job Search: Evidence from Google Search Data (with Scott R. Baker)
The Review of Economics and Statistics (2017) 99 (5): 756 – 768.
Job search is a key choice variable in theories of labor markets but is difficult to measure directly. We develop a job search activity index based on Google search data, the Google Job Search Index (GJSI). We validate the GJSI with both survey- and web-based measures of job search. Unlike those measures, the GJSI is high-frequency, geographically precise, and available in real time. We demonstrate the GJSIs utility by using it to study the effects of unemployment insurance (UI) policy changes between 2008 and 2014. We find no evidence of an economically meaningful effect of these changes on aggregate search.

The Welfare Economics of Default Options in 401(k) Plans (with Douglas Bernheim and Igor Popov)
American Economic Review 105.9 (2015): 2798-2837.
Default contribution rates for 401(k) pension plans powerfully influence workers' choices. Potential causes include opt-out costs, procrastination, inattention, and psychological anchoring. We examine the welfare implications of defaults under each of these theories. We show how the optimal default, the magnitude of the welfare effects, and the degree of normative ambiguity depend on the behavioral

[1]Equal authorship is the norm in economics. Deviations where there is a first author are denoted by *.

model, the scope of the choice domain deemed welfare-relevant, the use of penalties for passive choice, and other 401(k) plan features. Depending on which theory and welfare perspective one adopts, virtually any default contribution rate may be optimal. Still, our analysis provides reasonably robust justifications for setting the default either at the highest contribution rate matched by the employer or – contrary to common wisdom – at zero. We also identify the types of empirical evidence needed to determine which case is applicable.

Refereed Conference Proceedings:

Designing Consent: Choice Architecture and Consumer Welfare in Data Sharing (Extended Abstract) (with Chiara Farronato and Tesary Lin) *The Twenty-sixth ACM Conference on Economics and Computation (EC'25).*

News from Generative Artificial Intelligence is Believed Less (with Chiara Longoni*, Luca Cian, and Gordon Pennycook)
Fairness, Accountability, and Transparency (ACM FAccT 2022)

Bias and Reciprocity in Online Reviews: Evidence from Field Experiments on Airbnb (Extended Abstract) (with Elena Grewal, David Holtz, Matthew Pearson).
The Sixteenth ACM Conference on Economics and Computation (EC'15).

Working Papers and Ongoing Work

The Emerging Market for Intelligence: The Supply, Demand and Usage of LLMs (with Mert Demirer, Nadav Tadelis, and Sida Peng)
We document new facts about the supply and demand of LLMs as measured by API usage on Microsoft's Azure platform and on OpenRouter. We first document the rapid proliferation in the number of LLMs available, and the entry of inference providers such as DeepInfra, Fireworks, Cerebras, and Groq for open-source models. Second, we document trends in the pricing of LLMs, showing that usage-weighted prices remain relatively flat even as the price per unit of intelligence has fallen. We also document differences in pricing between open and closed-source models. Third, we consider the adoption of LLMs. There is substantial heterogeneity in the speed of adoption across industries, firm sizes, and models. We also document the degree of multi-homing by firms and apps across models. Finally, we study the response of demand to the entry of new and better models into the industry.

Designing Consent: Choice Architecture and Consumer Welfare in Data Sharing (with Chiara Farronato and Tesary Lin)
We study the welfare consequences of choice architecture for online privacy using a field experiment that randomizes cookie consent banners. We study three ways in which firms or policymakers can influence choices: (1) nudging users through banner design to encourage acceptance of cookie tracking; (2) setting defaults when users dismiss banners; and (3) implementing consent decisions at the website versus browser level. Absent design manipulation, users accept all cookies more than half of the time. Placing cookie options behind extra clicks strongly influences choices, shifting users toward more easily accessible alternatives. Many users dismiss banners without making an explicit choice, underscoring the importance of default settings. Survey evidence further reveals substantial confusion about default settings. Using a structural model, we find that among consent policies requiring site-specific decisions, consumer surplus is maximized when consent interfaces clearly display all options and default to acceptance in the absence of an explicit choice. However, the welfare gains from optimizing banner design are much smaller than those from adopting browser-level consent, which eliminates the time costs of repeated decisions.

Vertical Integration and Consumer Choice: Evidence from a Field Experiment (with Chiara Farronato and Alexander MacKay) Platforms, retailers, and other firms often offer their own products alongside products sold by competitors. We study the effects of this practice by combining a field experiment that hides brands owned by Amazon (i.e., private labels) from shoppers on Amazon.com with model-based counterfactuals and welfare analysis. In the absence of private labels,

consumers substitute toward products that are similar along most observable dimensions. Removing Amazon brands does not change consumers' search effort or their propensity to shop at other retail websites. Despite the ample availability of observably similar alternatives, our welfare estimates imply that, for the categories we study, removing Amazon brands would reduce consumer surplus by 5.5 percent in the short run, with approximately 10 percent of the impact due to equilibrium price increases by other sellers. The effects are heterogeneous, with consumer surplus reductions exceeding 10 percent in some categories, while other categories realize much smaller decreases when Amazon brands are removed. Demoting private labels in search results to counteract potential self-preferencing does not lead to gains in consumer surplus. This outcome arises because a subset of consumers derive greater utility from private labels and benefit from their high placement in search results.

Demand for LLMs: Descriptive Evidence on Substitution, Market Expansion, and Multihoming
This paper documents three stylized facts about the demand for Large Language Models (LLMs) using data from OpenRouter, a prominent LLM marketplace. First, new models experience rapid initial adoption that stabilizes within weeks. Second, model releases differ substantially in whether they primarily attract new users or substitute demand from competing models. Third, multi-homingusing multiple models simultaneouslyis common among apps. These findings suggest significant horizontal and vertical differentiation in the LLM market, implying opportunities for providers to maintain demand and pricing power despite rapid technological advances.

Algorithmic Auditing Using Revealed Preference and Experimental Variation (with Giorgos Zervas, Madhav Kumar, Michelle Du, Malay Haldar, and Peter Coles)
We propose a novel methodology for auditing algorithmic systems by treating them as decision-makers optimizing specific objectives. Combining revealed preference with experimental variation, our approach disentangles the priorities embedded within algorithms. Applying this framework to real-world ranking systems at a leading technology company, we estimate latent utility functions and infer algorithmic trade-offs. Our methodology has implications for fairness, transparency, and accountability in algorithmic decision-making.

Webmunk: A New Tool for Studying Online Behavior and Digital Platforms (with Chiara Farronato and Chris Karr)

Understanding the behavior of users online is important for researchers, policymakers, and companies. But measuring behavior online and conducting experiments is difficult for independent researchers, who do not have access to the user bases or software of technology companies. We introduce Webmunk, an open-source tool designed to make conducting online studies much easier. The user facing side of Webmunk is a browser extension that can track consumer browsing behavior and experimentally modify consumers experiences as they browse the Internet. It can be installed just like any other browser extension. Through this extension, researchers can collect a host of consumer data, from URLs to web page HTML elements, clicks, and scroll positions. The extension can also modify information and change the look of a web page, allowing for researchers to implement interventions that vary across study participants. A key advantage of this approach is that interventions occur while participants are engaging in real world activities such as shopping, browsing the news, using social media, or searching for information. We demonstrate the power of Webmunk by discussing two studies in progress.

The Coasean Singularity? Demand, Supply, and Market Design with AI Agents s (with Gili Rusak, Peyman Shahidi, Benjamin S. Manning, and John J. Horton)
NBER Volume "Economics of Transformative AI: A Research Agenda."

AI agents — autonomous systems that perceive, reason, and act on behalf of human principalsare poised to transform digital markets by dramatically reducing transaction costs. This chapter evaluates the economic implications of this transition, adopting a consumer-oriented view of agents as market participants that can search, negotiate, and transact directly. From the demand side, agent adoption reflects derived demand: users trade off decision quality against effort reduction, with outcomes mediated by agent capability and task context. On the supply side, firms will design, integrate, and monetize agents, with outcomes hinging on whether agents operate within or across platforms. At the market level, agents create efficiency gains from lower search, communication, and contracting costs, but also introduce frictions such as congestion and price obfuscation. By lowering the costs of preference elicitation, contract enforcement, and identity verification, agents expand the feasible set of market designs but also raise novel regulatory challenges. While the net welfare effects remain an empirical question, the rapid onset of AI-mediated transactions presents a unique opportunity for economic research to inform real-world policy and market design.

The Consumer Value of Personalized Ads (with Chiara Farronato, Tesary Lin, and Chuan Yu)
2022 Internet Society Foundation Grant ($150,000)

Resting Papers

Search, Matching, and the Role of Digital Marketplace Design in Enabling Trade: Evidence from Airbnb
(This paper is a major revision of the first part of my thesis: "Search Frictions and the Design of Online Marketplaces.")
Digital peer-to-peer marketplaces have increased trade in underutilized assets. I use the setting of Airbnb to investigate transaction costs in peer-to-peer markets and the role of search engine design in reducing these costs. I show that search is limited, directed, and often results in the rejection of searchers by hosts due to uncertain seller availability. I document the reasons for these rejections and show that rejections cause searchers to leave the market. I then simulate outcomes with alternative consideration sets and find that, without availability tracking by the search engine, the share of rejected contacts would more than double.

A Simulation Approach to Designing Digital Matching Platforms

Other Articles

What Does Banning Short-Term Rentals Really Accomplish? (with Sophie Calder-Wang, Chiara Farronato)
Harvard Business Review, February 15, 2024.

Understanding the Tradeoffs of the Amazon Antitrust Case (with Chiara Farronato, Andrei Hagiu, Dionne Lomax)
Harvard Business Review, January 11, 2024.

Tit for Tat? The Difficulty of Designing Two-Sided Reputation Systems (with David Holtz)
NIM Marketing Intelligence Review, 12(2), 34-39.

Digital Marketplaces
New Palgrave Dictionary of Economics, July 2017.

Digital Market Design and Inequality
Oxford University Press Volume IV: "More Equal by Design: Economic Design Responses to Inequality". Eds. Scott Duke Kominers and Alex Teytelboym. 2018.

Articles for the Public

Do Incentives to Review Help the Market?
Platform Papers Substack, May 11, 2023.

When Do Users Benefit From Platform Mergers? (with Chiara Farronato and Jessica Fong)
ProMarket, June 15, 2021.

The Balance Between Platform Variety and Network Effects (with Chiara Farronato and Jessica Fong)
VoxEU, January 24, 2021.

Presentations / Conferences

2025: NBER Digital Economics and AI (2x Co-author presented), Purdue, NYU, Yale, IIOC, Lyft, EC'25, MIT Futuretech
2024: Harvard Business School (TOM Unit), Conference on Digital Competition and Tech Regulation, SICS (Discussant), IIOC (Discussant), ASSA, Brandeis, Advances in Field Experiments, University of San Francisco, NBER Innovation (Discussant), The Marketplace Innovation Workshop, Quantitative Marketing and Economics, UC Davis, MIT IDSS, CODE, NBER Digital Platforms: Competition and Regulation Workshop
2023: U. Toronto (Rotman), Johns Hopkins (Carey), Nanyang Technological University (NTU), NABE Tech, VQMS, Indeed, Economics of Platforms Online Seminar, Online Business Platforms Seminar, National University of Singapore, City University of Hong Kong, DIPVAR: Fifth Economics of Platforms Workshop, Marketplace Innovation Workshop, Platform Research Symposium (BU), Advances in Field Experiments Conference (AFE)
2022: Econometric Society North American Winter Meetings, Next Generation of Antitrust, Data Privacy and Data Protection Scholars Conference, MIT Sloan, IIM Ahmedabad, Society of Labor Economics, IIOC, Competition and Consumer Welfare in the Platform Era (APCC), Marketing Science, QME (Discussion), Platform Strategy Conference, NBER Summer Institute (Digitization), UC Berkeley, Booth Marketing Workshop, JRC European Commission, Economics of Platforms Seminar
2021: CU Boulder, NBER IO (co-author), University of Rochester, The Marketplace Innovation Workshop, NBER Digitization, BU Platform Symposium (discussant), Airbnb
2020: Toulouse Conference on Digital Economics, NBER Winter Labor Studies, NYU Strategy Workshop, NBER Summer Institute Digitization, Advances in Field Experiments Conference, Quantitative Marketing and Economic Conference (co-author), University of Lausanne, Conference on Digital Experimentation, Workshop on Information Systems and Economics (WISE), Marketing Science Conference, Toulouse Platform Economics Seminar, APPAM Conference
2019: Lehigh University, Brookings Productivity Measurement Conference, Marketing Science Conference, NBER Summer Institute Digitization, Conference on Digital Experimentation
2018: University of Chicago, BU BDRM Pre-Conference on Digitized Behavior, INFORMS Marketing Science Conference, 16th ZEW Conference on The Economics of Information and Communication Technologies, Platform Research Symposium, FTC Microeconomics Conference, Washington University in St. Louis, INFORMS, Advances in Field Experiments Conference
2017: University of Toulouse, University of Minnesota, Microsoft Research, Hong Kong University, Third Workshop on Marketplace Innovation, Searle Conference on Internet and Innovation, 15th ZEW Conference on The Economics of Information and Communication Technologies, INFORMS, Clemson University, London Business School, University of Texas (Dallas), University of British Columbia, University of Pennsylvannia, Duke University, Boston University
2016: ASSA 2016, Boston College, Searle Conference on Internet and Innovation, Summer Institute in Competitive Strategy, NBER Summer Institute (Digitization and IO), Travel & Tourism Conference, HCEO Market Design Approaches to Inequality (U. Chicago), Northwestern U., Workshop on Information Systems (WISE), UMass. Amherst (Hotel Admin.), Institute for the Future (IFTF)
2015: Toulouse Network on Information Technology (Microsoft Research), MIT, Berkeley Crowdfunding Conference, NBER Summer Institute (Digitization, Labor Studies), FTC Sharing Economy Workshop, President's Council of Advisors on Science and Technology - Technology and the Future of Cities, Wharton, U. Chicago Harris School, U. Rochester Business School, Cornell School of Hotel Administration, Sciences Po, UCLA Anderson, Harvard (EconCS), Ebay Data Labs, NBER Productivity Seminar, Society of Labor Economists Conference (SOLE)
2014: Harvard Business School, Columbia Business School, NBER Summer Institute (Digitization),

University of Illinois - Urbana Champaign, Microsoft Research, Airbnb Tech Talk, Square Inc., Conference on Digital Experimentation at MIT (CODE), Northeastern University
2013: NET Institute Conference, ASSA 2013
2011: Google Economics Group

Refereeing and External Service

Econometrica, Quarterly Journal of Economics, American Economic Review, AER: Insights, Journal of Political Economy, Review of Economic Studies, Nature, Management Science, AEJ-Applied, AEJ-Micro, Journal of Labor Economics, Journal of Public Economics, RAND Journal of Economics, AEJ-Policy, PNAS, Journal of Economics and Management Strategy, Economic Journal, Journal of Human Resources, Journal of Industrial Economics, Journal of Applied Econometrics, Program Committee of the 25th World Wide Web Conference (WWW'16), Manufacturing and Service Operations Management, ICIS, Marketing Science, AAAI/ACM conference on Artificial Intelligence, Ethics, and Society (2019), Program Committee of ACM Conference on Economics and Computation 2019 (EC'19, EC'20, EC'22), Journal of Marketing, Nature - Human Behavior, Review of Economics of the Household, Empirical Economics, Quantitative Marketing and Economics

Co-organizer, NBER Digital Economics and AI Winter Meeting 2026

Distinguished Service Award for Refereeing at Management Science (2019, 2020, 2021, 2022, 2023)

Member of Editorial Review Board, Marketing Science

Program Committee, QME 2025

Senior Program Committee, EC 2025

Justified Posteriors Podcast (2024 - Present)

The Virtual Quantitative Marketing Seminar (2020 - 2023) - Founded and co-organized a regular virtual seminar with 100+ person attendance on topics in quantitative marketing.
`https://sites.google.com/view/vquantmarketing/`

Economics of Platforms Seminar (2020 - 2024) - Scientific committee.
`https://www.tse-fr.eu/online-seminar-economics-platforms`

ProjectN95 (2020) - Advised ProjectN95 on designing a marketplace for masks and other personal protective equipment.

Economic Frontiers Podcast (2016 - 2017) - Economic Frontiers is a podcast about the frontier of economics research regarding technology, innovation, and digitization. Each episode brings in a leading researcher or research team for a discussion of their work and its broader implications.

MIT On-Demand Economy Workshop and Conference (2016) - Co-organized conference bringing together academics, technology leaders, and policy makers to discuss how technology is changing matching in the labor market.

Boston University Service

Marketing Seminar Organizer (2018 - 2020, 2023 - 2024) - Co-organized the research seminar for the marketing department.

MSBA PDC (2020 - 2024) - Provided input into the development of the MSBA program.

Thesis Committee Member - Ian Meeker (Boston University Department of Economics, 2022), Richard Yan (Boston University Department of Economics, 2022), Hannah Zhang (Boston University Department of Economics, 2022)

Co-organizer of series "Machine Learning for Model-Rich Problems" at the Hariri Institute. 2021

Scholarships, Honors and Awards

Grants:
2024 Institute for Humane Studies ($5,000, 1-year)
2022 Internet Society Foundation Grant ($150,000, 2-years)
2022 Questrom Digital Business Institute ($20,000, 1-year)
2020 Boston University Hariri Institute Junior Faculty Fellow ($10,000, 3-years)
2013 NET Institute Fellowship
Scholarships / Honors:
Slatkin Family Research Fund Award (2023)

BU Questrom Dean's Research Scholar (2022)
Shultz Fellowship Award, George P. Shultz Scholar, Haley-Shaw Fellowship Scholar
Awards:
Allen Starling Johnson, Jr. Best Undergraduate Thesis in Economics Prize

Teaching Experience

2018 - 2024 (Boston U.): Measuring Impact with Causal Methods, Business Experimentation and Causal Methods (MBA, Masters in Business Analytics, Undergraduate)
2018 (Boston U.): Mathematical Modeling and Marketing (Ph.D.) (joint with Professors Johnson, Srinivasan, and Sun.)
2015 - 2024: Guest lectures: Ph.D. Market Design (Harvard), MBA Marketing Analytics (MIT Sloan, Boston U. Questrom School of Business), MBA Information Economics (MIT Sloan)
2010 - 2013 (Stanford): TA: Advanced Topics in Econometrics (Prof. DeGiorgi), Introduction to Econometrics (Prof. Harding and Prof. Mahajan), Market Design (Prof. Levin).
2007 - 2008 (Duke): TA: Intermediate Microeconomics (Prof. Yildirim and Prof. Taylor), Financial Markets and Investment (Prof. Eraker), Junior Honors Thesis Seminar (Prof. Tauchen and Prof. Bollerslev).

Data Science / Other

A National Survey of the Peer-to-Peer Economy (with Chiara Farronato and Rover.com)
Designed a quarterly national survey to measure the current and expected size of the peer-to-peer economy. The survey also quantifies the importance of barriers to the consumption of peer-to-peer services in the labor, hospitality, transportation, and pets markets.
Ranking Algorithm Design:
Co-designed a proprietary algorithm that uses discrete choice models to rank the listings displayed to Airbnb searchers.
Search Experimentation Framework:
Co-designed a system that tracks the actions of searchers and evaluates search experiments.
Operations Experiments:
Designed experiments to evaluate the effectiveness of customer support and platform pricing.
Consulting:
Advised on the design of Airbnb's reputation system, pricing recommendations, marketing strategy, and academic collaboration policy.
Media:
Co-created the Airbnb Hospitality Index and the Airbnb Global Citizenship Index. This work was covered in Le Monde, El Pais, the Telegraph, and other media outlets.