# Guy Aridor

August 2024

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## Academic Appointments and Affiliations

#### Northwestern University, Kellogg School of Management

Assistant Professor of Marketing

2022-

Donald P. Jacobs Scholar

2022-2023

CESifo Research Network Affiliate

2022-

### Education

### Columbia University

Ph.D. in Economics 2022

Committee: Yeon-Koo Che, Tobias Salz, Andrey Simonov, Michael Woodford, Andrea Prat

#### **Boston University**

B.A. Computer Science, Pure/Applied Mathematics, Economics

2014

Honors in Economics, summa cum laude

### Research Interests

Industrial Organization, Economics of Digitization, Experimental Economics, Quantitative Marketing

### **Journal Publications**

1. Recommenders' Originals: The Welfare Effects of the Dual Role of Platforms as Producers and Recommender Systems (w/ Duarte Gonçalves)

International Journal of Industrial Organization (2022): Publisher's Version

2. The Effect of Privacy Regulation on the Data Industry: Empirical Evidence from GDPR (w/ Yeon-Koo Che, Tobias Salz)

RAND Journal of Economics (2023); Publisher Version

- 3. Information-Constrained Coordination of Economic Behavior
  - (w/ Rava Azeredo da Silveira, Michael Woodford)

Journal of Economic Dynamics and Control (2024, Special Issue); Paper

4. The Economics of Social Media (w/ Rafael Jimenez-Duran, Ro'ee Levy, Lena Song)

Journal of Economic Literature (Forthcoming); Paper

5. Measuring Substitution Patterns in the Attention Economy: An Experimental Approach

RAND Journal of Economics (Accepted); Paper

### Working Papers

6. The Economics of Recommender Systems: Evidence from a Field Experiment on MovieLens (w/ Duarte Gonçalves, Ruoyan Kong, Daniel Kluver, Joseph Konstan) Draft

Short Abstract: We conduct a longitudinal field experiment on the movie recommendation platform MovieLens where we randomize the set of recommended movies and elicit beliefs about unseen movies. We use the data to decompose the influence that online recommendations have on consumption choices in terms of their informational and product discovery value.

7. Evaluating The Impact of Privacy Regulation on E-Commerce Firms: Evidence from Apple's App Tracking Transparency (w/ Yeon-Koo Che, Brett Hollenbeck, Maximilian Kaiser, Daniel McCarthy)

Revision Requested, Management Science

Short Abstract: We show that Apple's App Tracking Transparency Policy degraded the quality of targeted advertisements on Meta and led to medium-term reductions in revenues and customer acquisition for more Meta-dependent firms.

8. Competing Bandits: The Perils of Exploration under Competition, Draft (w/ Yishay Mansour, Alex Slivkins, Steven Wu)

Minor Revision Requested, ACM Transactions on Economics and Computation

We study the tension between exploration and competition and ask whether competition incentivizes the adoption of better exploration algorithms. We highlight how our results relate to the role of data in the first-mover advantage in the digital economy.

### Works in Progress

9. Privacy and Information Interventions: Evidence from a Field Experiment (w/ Sam Goldberg)

Received Marketing Science Institute Grant, Law & Economics Center's Program on Economics & Privacy (PEP) Grant

# Peer Reviewed Conference Proceedings

1. The Perils of Exploration under Competition: A Computational Modeling Approach, (w/ Kevin Liu, Alex Slivkins, Steven Wu)

Extended Abstract at ACM Conference on Economics and Computation (2019)

2. Deconstructing the Filter Bubble: User Decision-making and Recommender Systems (w/ Duarte Gonçalves, Shan Sikdar)

Published Version at ACM Conference on Recommender Systems (2020)

3. The Effect of Privacy Regulation on the Data Industry: Empirical Evidence from GDPR (w/ Yeon-Koo Che and Tobias Salz)

Extended Abstract at ACM Conference on Economics and Computation (2021)

4. Drivers of Digital Attention: Evidence from a Social Media Experiment

Extended Abstract at ACM Conference on Economics and Computation (2023)

5. The Economics of Recommender Systems: Evidence from a Field Experiment on MovieLens (w/ Duarte Gonçalves, Ruoyan Kong, Daniel Kluver, Joseph Konstan)

Extended Abstract at ACM Conference on Economics and Computation (2023)

6. The MovieLens Beliefs Dataset: Collecting Pre-Choice Data for Online Recommender Systems (w/ Duarte Gonçalves, Ruoyan Kong, Daniel Kluver, Joseph Konstan)

Full Paper at ACM Conference on Recommender Systems (2024)

# **Book Chapters**

1. Experiments with Social Media (w/ Rafael Jimenez-Duran, Ro'ee Levy, Lena Song) Draft Prepared for Handbook of Experimental Methods in the Social Sciences.

### Presentations

<u>2024-2025</u>: Northwestern Institute on Complex Systems<sup>†</sup>, New Directions in Research on the Psychology of Technology (BU)<sup>†</sup>, Digital Economics Paris Seminar<sup>†</sup>, ACM Conference on Recommender Systems<sup>‡</sup>

<u>2023-2024</u>: Advances in Field Experiments, ASSA Meetings (Discussant), NBER Digital Economics and AI Spring Meeting (Discussant), Netflix Research, TSE Economics of Platforms Online Seminar, ESIF Economics and AI+ML Meeting<sup>†</sup>, UK Workshop on Digital Economics<sup>‡</sup>

2022-2023: Quantitative Marketing and Economics Conference, Virtual Quantitative Marketing Seminar, U.S. Department of Justice Antitrust, Federal Trade Commission, CESifo Area Conference on Economics of Digitization, University of Chicago Booth (Marketing), TSE Economics of Platforms Online Seminar, NBER Meeting of Digital Economics, USC AI in Management Conference, Stanford Workshop on New Measures of the Economy, Pontificia Universidad Catolica de Chile (Management Science), Singapore Management University (Econ), National University of Singapore (Marketing), ACM Conference on Economics and Computation, UK Competition and Markets Authority, NeurIPS Workshop on Information-Theoretic Principles in Cognitive Systems<sup>‡</sup>, Workshop on Learning and Bounded Rationality (Stony Brook)<sup>‡</sup>, Workshop on Memory, Beliefs and Choice<sup>‡</sup>

2021-2022: BIRS Workshop on Statistical Methods for Computational Advertising, INFORMS Annual Meeting, MIT Conference on Digital Experimentation, Tel Aviv University (Econ), Tel Aviv Coller (IS/Digitization), Hebrew University (Econ), Sciences Po (Econ), Imperial College London (Econ), University of Michigan Ross (Operations), Stanford GSB (Operations), University of Toronto Rotman (Econ), Microsoft (Office of Chief Economist), Toulouse School of Economics, Columbia GSB (Operations), Northwestern Kellogg (Marketing), HEC Paris (Econ/Decision Sciences), Stanford Digital Economy Lab Seminar, Keystone Strategy, CEPR-EIEF-Tor Vergata Workshop on Media, Technology, Politics and Society, NBER Summer Institute (IT and Digitization), ASSA Meetings<sup>‡</sup>

<u>2020-2021</u>: ACM Conference on Recommender Systems, ACM Conference on Economics and Computation, MIT Conference on Digital Experimentation, Yale Law Big Tech & Antitrust Conference - Competition Policy in the Digital Age, International Conference on Computational Social Science, World Congress of Game Theory

<u>Earlier</u>: Young Economists Symposium, ACM Conference on Economics and Computation, ACM EC Workshop on Learning in the Presence of Strategic Behavior, ICML Workshop on Participatory Approaches to Machine Learning, FTC PrivacyCon, New York Academy of Sciences Annual Machine Learning Symposium, Boston New Tech Meetup, Machine Intelligence Conference

 $(^{\dagger} = \text{scheduled}, ^{\dagger} = \text{co-author presentation})$ 

# Research Grants and Fellowships

Research Grant, George Mason Program on Economics & Privacy (PEP), 2024 - \$15,000.00

Research Grant, Marketing Science Institute, 2023 - \$6,000.00

Program for Economic Research Award for Experimental Research, Columbia University, 2021 - \$19,625.00

Program for Economic Research Summer Fellowship, Columbia University, 2018,2020

College Prize for Excellence in Economics, Boston University, 2014

Hariri Institute for Computing Summer Research Award, Boston University, 2013

Tuition Exchange Scholarship, Boston University, 2010-2014

### Teaching Experience

#### Northwestern Kellogg

Omnichannel Experience Strategy 2022-Present

Columbia University

"Data TA" - help honors thesis students with programming and econometrics 2020, 2021

Teaching Assistant for Introduction to Econometrics for Simon Lee 2019, 2022

2017

Teaching Assistant for Economic Growth and Development for Xavier Sala-i-Martin

## Work Experience

Consultant at Netflix Research	2024
Software Engineer at HubSpot	2015-2016
Software Engineer at Nutonian	2014-2015
Co-founder at RequestNow	2012-2014

### Professional Service

#### Refereeing:

Marketing / Management: Marketing Science, Management Science, Journal of Marketing Research, Quantitative Marketing and Economics, Management Information Systems Quarterly, California Management Review, Journal of Business Venturing, International Journal of Research in Marketing

**Economics**: American Economic Journal: Microeconomics, American Economic Review, Economic Journal, Journal of the European Economic Association, Journal of Political Economy Microeconomics, Quantitative Economics, Review of Economic Studies

Other: National Science Foundation, ACM Conference on Economics and Computation Program Committee (EC '24), MSI Alden G. Clayton Doctoral Dissertation Proposal Competition

#### Conferences:

Workshop on Platform Analytics (2024, 2025, UCSD, Scientific Committee)

SSRC Workshop on the Economics of Social Media (2023, NYU, Organizing/Scientific Committee)

Spring Meeting of Young Economists (2023, Collegio Carlo Alberto, Track Chair for IO)

Young Economists Symposium (2019, Columbia University, Organizing/Scientific Committee)

### Miscellaneous

Nationality: Israel, United States

Programming Languages: Julia, Python, JavaScript, Java, C++, SQL, R, STATA

Human Languages: English (native), Hebrew (intermediate), Spanish (intermediate)

Open-Source Software: PlanOut.js, react-experiments, Scientist4J ( $\sim 2$  million total downloads)

Other Awards: BattleHack Boston Winner / 3rd Place World Finals, 2014

Press Coverage (Research and Projects): Boston Globe, VoxEU, Bostinno, Kellogg Insight, MIT Sloan Ideas Made to Matter, Marketing Science Institute, Stratechery, Marginal Revolution, Crooked Timber, Forbes India, Exame (Brazil), Folha de S.Paulo (Brazil), Welt (Germany), Heise (Germany)