# Guy Aridor

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# Academic Appointments and Affiliations

### Northwestern University, Kellogg School of Management

Assistant Professor of Marketing

Donald P. Jacobs Scholar

CESifo Research Network Affiliate

2022SSRC Digital Platforms Initiative

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

### **Publications**

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

14th ACM Conference on Recommender Systems 2020 (RecSys '20), Publisher's Version

2. 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

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

RAND Journal of Economics (Forthcoming); Abstract at ACM EC'21

### Working Papers

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

Extended Abstract to appear at EC'23

Short Abstract: I study demand for social media applications by conducting an experiment where I comprehensively monitor how participants spend their time and randomize access to applications. I characterize substitution patterns and estimate a demand model with inertia. I relate the findings to antitrust issues in these markets and argue that relevant markets for social media applications may be wider than those considered by regulatory authorities.

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

Extended Abstract to appear at EC'23

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 recommender systems have on consumption choices in terms of their informational and product discovery value.

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

An earlier version The Perils of Exploration under Competition: A Computational Modeling Approach (w/ Kevin Liu, Alex Slivkins, Steven Wu) was at ACM EC '19

Short Abstract: We study the tension between exploration and competition and ask whether competition incentivizes the adoption of better exploration algorithms.

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

Short Abstract: We study a model of decision-making based on the structure of a variational autoencoder. We compare our approach to existing approaches such as rational inattention and show that our model can provide predictions consistent with experimental work on coordination games.

### Presentations

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)<sup>†</sup>, National University of Singapore (Marketing)<sup>†</sup>, ACM Conference on Economics and Computation<sup>†</sup>, UK Competition and Markets Authority<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)

<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

 $(^{\dagger} = \text{scheduled})$ 

# Research Grants and Fellowships

Program for Economic Research Award for Field or Experimental Research, Columbia University, 2021

Amount: \$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

Spring 2023

#### Columbia University

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

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

Teaching Assistant for Economic Growth and Development for Xavier Sala-i-Martin Fall 2017

# Work Experience

Software Engineer at HubSpot	2015-2016
Software Engineer at Nutonian	2014-2015
Co-founder at RequestNow	2012-2014

### Professional Service

**Refereeing:** American Economic Journal: Microeconomics, American Economic Review, International Journal of Research in Marketing, Management Science, Journal of Business Venturing, The Economic Journal

 $Organizing/Scientific\ Committee,\ SSRC\ Workshop\ on\ the\ Economics\ of\ Social\ Media,\ 2023$ 

Scientific Committee for Industrial Organization, Spring Meeting of Young Economists, 2023

Organizing Committee, Young Economists Symposium, Columbia University, 2019

### 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)

 $Other\ Awards\colon$ Battle Hack Boston Winner / 3rd Place World Finals, 2014