

Jeremy T. Fox

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Department of Economics MS-22
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Education

PhD, MA Stanford University, Economics, 2003

BA, Rice University, Economics, Political Science and Statistics, 1998

Employment

Rice University, Department of Economics

Shatto Endowed Chair of Economics, 2020–

Professor, 2019–2020

Associate Professor with tenure, 2015–2019

University of Michigan, Department of Economics

Associate Professor with tenure, 2013–2015

Assistant Professor, 2010–2013

University of Chicago, Department of Economics

Assistant Professor, 2003–2010

Fields (in descending order)

Industrial Organization

Econometrics

Labor Economics

Affiliations and Editorial Positions

National Bureau of Economic Research (NBER), Research Associate, 2008–present

Journal of Applied Econometrics, Associate Editor, 2018–2020

Journal of Econometrics, Associate Editor, 2012–2019

International Journal of Industrial Organization, Associate Editor, 2006–2013

Journal of Industrial Economics, Associate Editor, 2013–2015

Quantitative Economics, Associate Editor, 2019–present

Quantitative Marketing and Economics, Associate Editor, 2010–present

Major Administrative Positions

Associate Chair for Junior Recruiting at Michigan, 2014–2015

Executive Committee at Michigan, 2011–2012, 2014–2015

Arts and Sciences College Computer Committee at Michigan, 2013–2015

University-wide Computer Committee at Michigan, 2014–2015

Published Papers

A Note on Nonparametric Identification of Distributions of Random Coefficients in Multinomial Choice Models, *Annals of Economics and Statistics*, 2021, 142, 305–310.

Unobserved Heterogeneity in Matching Games, *Journal of Political Economy*, 2018, 126(4), 1339–1371 (lead article) (with Chenyu Yang and David Hsu)

Estimating Matching Games with Transfers, *Quantitative Economics*, 2018, 9(1), 1–38 (lead article).

Specifying a Structural Matching Game of Trading Networks with Transferable Utility, *American Economic Review: Papers & Proceedings*, 2017, 107(5), 256–260.

A Note on Identification of Discrete Choice Models for Bundles and Binary Games, *Quantitative Economics*, 2017, 8, 1021–1036. (with Natalia Lazzati)

A Simple Nonparametric Approach to Estimating the Distribution of Random Coefficients in Structural Models, *Journal of Econometrics*, 2016, 195, 236–254. (with Kyoo il Kim and Chenyu Yang)

Nonparametric Identification and Estimation of Random Coefficients in Multinomial Choice Models, *RAND Journal of Economics*, 2016, 47(1), 118–139. (with Amit Gandhi)

Reconfigurable Radios: A Possible Solution to Reduce Entry Costs in Wireless Phones, *Proceedings of the IEEE*, 2015, 103(3), 438–451. (with Mina Rais-Zadeh, Yogesh Gianchandani and David Wentzloff)

Measuring the Efficiency of an FCC Spectrum Auction, *American Economic Journal: Microeconomics*, 2013, 5(1), 100–146. (with Patrick Bajari)

Reprinted in *Handbook of Spectrum Auction Design* by Bichler and Goeree, 2017

Improving the Numerical Performance of Static and Dynamic Aggregate Discrete Choice Random Coefficients Demand Estimation, *Econometrica*, 2012, 80(5), 2231–2267. (with Jean-Pierre Dubé and Che-Lin Su)

The Random Coefficients Logit Model Is Identified, *Journal of Econometrics*, 2012, February, 166(2), 204–212. (with Kyoo il Kim, Stephen Ryan and Patrick Bajari)

A Simple Estimator for the Distribution of Random Coefficients, *Quantitative Economics*, 2011, November, 2(3), 381–418. (with Kyoo il Kim, Stephen Ryan and Patrick Bajari)

Does Input Quality Drive Measured Differences in Firm Productivity? *International Economic Review*, 2011, November, 52(4), 961–989. (lead article) (with Valérie Smeets)

Identification in Matching Games, *Quantitative Economics*, 2010, November, 1(2), 203–254 (lead article).

Estimating the Employer Switching Costs and Wage Responses of Forward-Looking Engineers, *Journal of Labor Economics*, 2010, April, 28(2), 357–411.

Firm Size Wage Gaps, Job Responsibility and Hierarchical Matching, *Journal of Labor Economics*, 2009, January, 27(1), 83–126.

Matching models: empirics, *New Palgrave Dictionary of Economics*, 2009.

Evaluating Wireless Consolidation Using Semiparametric Demand Estimation. *Quantitative Marketing and Economics*, 2008, 6(4), 299–338. (lead article) (with Patrick Bajari and Stephen Ryan)

Linear Regression Estimation of Discrete Choice Models with Nonparametric Distributions of Random Coefficients, *American Economic Review P&P*, 2007, 97(2), 459–463. (with Patrick Bajari and Stephen Ryan)

Semiparametric Estimation of Multinomial Discrete Choice Models Using a Subset of Choices, *RAND Journal of Economics*, 2007, 38(4), 1002–1019.

Recent Advances in Structural Econometric Modeling: Dynamics, Product Positioning and Entry, *Marketing Letters*, 2005, 16(3), 209–224. (with Jean-Pierre Dubé, K. Sudhir, and others)

Working Papers

Identifying Demand with Multidimensional Unobservables: A Random Functions Approach (with Amit Gandhi)

An Empirical, Repeated Matching Game Applied to Market Thickness and Switching Consolidation in the Wireless Phone Industry (NET Institute Working Paper 05-13)

Full Identification in the Generalized Selection Model (with Amit Gandhi)

Mobile Phone Mergers and Market Shares Short Term Losses and Long Term Gains (with Hector Perez-Saiz, NET Institute Working Paper 06-16)

Three Empirical Checks for the Empirical Validity of Olley and Pakes Productivity Estimators (with Valérie Smeets)

Unobserved Heterogeneity in Matching Games with an Application to Venture Capital (with David Hsu and Chenyu Yang)

Using Wireless Consolidation to Distinguish Heterogeneous Technologies and Scale Economies (with Hector Perez-Saiz)

Computer Software (available on my website)

A Toolkit for Matching Maximum Score Estimation and Point and Set Identified Subsampling Inference (with David Santiago)

Code for the Fox, Kim, Ryan & Bajari random coefficients estimator

Code for the Dubé, Fox & Su MPEC estimator for the BLP model

Policy Comments

Comment on FCC Public Notice DA 06–238 (proposed rules for Advanced Wireless Services auction) (with Patrick Bajari)

Honors & Grants

National Science Foundation grant SES– 2019028, “Repeated Matching Games: An Empirical Framework”, 2020–2023.

Center for Econometrics and Microdata Practice, Jinan University (Guangzhou, China), Fellow

National Science Foundation grant SES–1730636, “Operationalizing Pseudo-Market Mechanisms” (with Hulya Eraslan and Yinghua He), 2017–2020.

W. Glenn Campbell and Rita Ricardo-Campbell National Fellow and the John Stauffer National Fellow at the Hoover Institution, 2013–2014

Michigan Institute for Teaching and Research in Economics (MITRE) faculty research grant

National Science Foundation grant SES-1247565, “MEMS Reconfigurable Radios: System Development and Entry Costs in Wireless Phones” (with Mina Rais-Zadeh, David Wentzloff, Yogesh B. Gianchandani), 2012–2015.

Economics of Information and Communications Technologies workshop, keynote speaker (Portugal, 2013)

Excellence in Refereeing Award 2012, *American Economic Review*

National Science Foundation grant SES-09022046, “Nonparametric Identification and Estimation of Distributions of Unobserved Heterogeneity in Economic Choice Models using Mixtures” (with Amit Gandhi), 2009–2011.

National Science Foundation grant SES-0721036 “Estimating Network and Matching Games of Interfirm Relationships”, 2007-2010.

Stigler Center for the Study of the Economy and the State, research support, 2007–2008 and 2008–2009

Social Science Divisional Research Grant, University of Chicago, 2004, 2005, 2006, 2007.

Olin Junior Faculty Fellowship, University of Chicago, 2004–2005 and 2005–2007

NET Institute Summer Grant, 2004, 2005 & 2006

Landau Prize for the Best Working Paper, Stanford Institute for Economic Policy Research, 2003

Kapnick Foundation Dissertation Fellow, Stanford Institute for Economic Policy Research, 2002–2003

Teaching

PhD Industrial Organization (Chicago, Michigan, Rice)

PhD Computational Economics (Michigan, Rice)

Undergraduate Econometrics (Chicago, Michigan, Rice)

Undergraduate Industrial Organization (Rice)

Undergraduate Regulation & Market Design (Michigan)

Undergraduate Research in Econometrics (Rice)

Graduate Theory and Empirics of Matching Games (mini-course at Tel Aviv University, University of Melbourne)

Graduate Estimation, Identification and Computation of Unobserved Agent Heterogeneity Distributions in Economic Choice Models (mini-course at INSEE-CREST and ENSAE in Paris)

Conference Organizing / Scientific Committees / External Reviews

University of Miami Department of Economics external review committee, 2020

From Theory to Practice: New Developments in Structural Econometrics and Policy Analysis, Becker Friedman Institute, Chicago, 2019.

Summer Institute in Competitive Strategy conference on Big Data and Marketing, Berkeley Hass, Summer 2015

Economics of Information and Communications Technologies, Portugal, 2012, 2013, 2014, 2015

Stanford Institute for Theoretical Economics, Theory Based Empirical Work, Summer 2013

Econometric Society, North American Meeting, Summer 2013

MITRE Auctions and Matching, Michigan, Fall 2012

Milton Friedman Institute, Chicago, Matching and Price Theory Conference, 2011

Industrial Organization Society, ASSA Meetings, 2011, Two Sessions

Quantitative Marketing and Economics, UCLA, 2010

Institute for Computational Economics, Chicago, Micro Conference Organizer, 2008, 2009

Dissertation Advising (PhD chair or committee membership)

Giovanni Aiello (Chair)

Dept. of Economics, Rice University

Masoud Jabbari (Chair)

Dept. of Economics, Rice University

Yuri Matsumura (Chair)
Dept. of Economics, Rice University

Dibya Mishra (Chair)
Dept. of Economics, Rice University

Taisei Noda (Chair)
Dept. of Economics, Rice University

Suguru Otani (Chair)
Dept. of Economics, Rice University

Qiran Shao (Co-Chair)
Dept. of Economics, Rice University

Igor Westphal (Chair)
Dept. of Economics, Rice University

Sen Lu (Chair)
Dept. of Economics, Rice University

Xiaoyu (Fisher) Yu (Co-Chair)
Dept. of Economics, Rice University

Amir Kazempour (Chair)
Dept. of Economics, Rice University

Yakym Pirozhenko (Chair)
Dept. of Economics, Rice University

Rajarshi Bhoval (Chair)
Dept. of Economics, Rice University
Reallocating Bonus Payments Through Competition to Improve Medicare Advantage Plan Quality: A Dynamic Game Approach

Xunjie Zheng (Chair)
Dept. of Economics, Rice University
Do Pharmaceutical Research Alliances Promote Drug Innovation?

Michael Shashoua (Chair)
Dept. of Economics, Rice University
Private Labels, Famous Brands and Heterogeneous Households
Initial placement: Capital One
Current institution: Facebook

Benjamin Glass
Dept. of Economics, University of Michigan, 2018
Attending to Inattention: Identification of Deadweight Loss under Non-Salient Taxes
Initial placement: Pennsylvania State University, Department of Economics
(Visiting Assistant Professor)
Current institution: US Department of the Treasury

Adam Dearing
Dept. of Economics, University of Michigan, 2017
Pricing Policy and Welfare in Retail Chains: A Case for Vertical Incentives

Initial placement: Ohio State University, Department of Economics
Current placement: Cornell's Johnson Graduate School of Management

Chenyu Yang (Co-Chair)

Dept. of Economics, University of Michigan, 2016
Vertical Integration and Innovation in the Chipset and Smartphone Industry
Initial placement: University of Rochester, Simon School of Business (economics)
Current institution: University of Maryland, Department of Economics

Reid Dorsey-Palmateer

Dept. of Economics, University of Michigan, 2015
The Effects of Wind Power Intermittency on Wind Power and Emissions
Initial placement: Western Washington University, Department of Economics

Evan Herrnstadt

Dept. of Economics, University of Michigan, 2015
Conservation Versus Competition? Environmental Objectives in Government Contracting
Initial placement: Harvard University, post-doc
Current institution: Congressional Budget Office

Kuncheng Zheng

Ross School of Business, University of Michigan, 2015
Bank Equity Capital and Risk-taking Behavior: The Effect of Competition
Initial placement: Northeastern University, Finance

Ryan Monarch

Dept. of Economics, University of Michigan, 2014
"It's Not You, It's Me": Breakups in U.S.-China Trade Relationships
Initial placement: Federal Reserve Board

Marek Zapletal

Ross School of Business, University of Michigan, 2014
Three Essays on Entrepreneurship and Regulation
Initial placement: Brattle Group

Yu Zhou

Dept. of Economics, University of Michigan, 2014
Identification and Estimation of Entry Games Under Symmetry of Unobservables
Initial placement: Fudan University, Department of Economics

Andrew McCallum

Dept. of Economics, University of Michigan, 2013
The Structure and Evolution of Entry Costs in Trade
Initial placement: Federal Reserve Board

Matthew Backus

Dept. of Economics, University of Michigan, 2012
Why Is Competition Correlated with Productivity?
Initial placement: Cornell, Department of Economics (eBay postdoc)
Current institution: Columbia Business School

Di Li

Ross School of Business, University of Michigan, 2012

Managerial Incentive and Takeovers: A Structural Investigation

Initial placement: Georgia State University, finance

Current institution: Peking University HSBC Business School

Adam Clemens (Co-Chair)

Dept. of Economics, University of Chicago, 2010

Essays on worker compensation

Initial placement: CNA

Hector Perez-Saiz (Co-Chair)

Dept. of Economics, University of Chicago, 2010

Building new plants or entering by acquisition? Estimation of an entry model for the U.S. cement industry

Initial placement: Bank of Canada

Current institution: International Monetary Fund

Oktay Akkus

Dept. of Economics, University of Chicago, 2009

Essays on endogenous matching applications

Initial placement: Bates White

Current institution: Nathan Inc.

Gustaf Bruze

Dept. of Economics, University of Chicago, 2009

Essays on the causes and consequences of marital sorting on schooling

Initial placement: Aarhus University

Current institution: Karolinska Institute

Mitsukuni Nishida (Chair)

Dept. of Economics, University of Chicago, 2009

Estimating a model of strategic network choice: The convenience-store industry in Okinawa

Initial placement: Johns Hopkins University, Dept. of Economics (Visiting Assistant Professor)

Current institution: Johns Hopkins University, Carey Business School

Heleno Pioner

Dept. of Economics, University of Chicago, 2008

Semiparametric identification of multidimensional screening models

Initial placement: Fundação Getúlio Vargas, Dept. of Economics, Brazil

Current institution: Amazon

Amit Gandhi

Booth School of Business, University of Chicago, 2007

Rational expectations at the racetrack: Testing expected utility theory

Initial placement: Univ. of Wisconsin, Dept. of Economics

Current institution: University of Pennsylvania, Dept. of Economics

Hongju Liu

Booth School of Business, University of Chicago, 2007
Essays on complementarities in technology markets
Initial placement: Univ. of Connecticut, Marketing

Yukichi Mano

Dept. of Economics, University of Chicago, 2007
Essays on cluster-based industrial development
Initial placement: National Graduate Institute for Policy Studies, Japan
Current institution: Hitotsubashi University, Japan

Alexander Popov

Dept. of Economics, University of Chicago, 2007
Financial markets development, allocation of capital to ideas, and firm-sponsored training
Initial placement: European Central Bank

Rachel Soloveichik (Chair)

Booth School of Business, University of Chicago, 2007
Family transfers in rural Mexico: An application to risk sharing and labor supply elasticity
Initial placement: Bureau of Economic Analysis

Avraham Stoler

Dept. of Economics, University of Chicago, 2005
Mortality risk and economic behavior
Initial placement: Brattle Group
Current placement: DePaul University, Dept. of Economics

Visits (1 week or more)

Aarhus University, two weeks, 2003

Booth Graduate School of Business, University of Chicago, marketing group, 2 weeks, 2016

Bank of Canada, Financial Stability Department, 1 week, 2010

Fudan University, Shanghai, 1 week, 2016

INSEE-CREST (Paris), Industrial Organization Section, 1 month, 2008

Microsoft Research New England, 1 week, 2017

Northwestern University, Department of Economics, Center for the Study of Industrial Organization, 2 quarters, 2009

Princeton University, Department of Economics, 1 week, 2016

Sciences Po, Department of Economics, 1 week, 2014

Stanford University, Hoover Institution, 1 year, 2013–2014

Tel Aviv University, Department of Economics, 1 month, 2005

UCL, Department of Economics, 1 week, 2011

Washington University in St Louis, Olin, 1 week, 2013

Yale University, Cowles Foundation, 1 week, 2011

Research Presentations

2001–2002: Aarhus School of Business, Incentives & Beyond / Stockholm School, DILEED / Wellington

2002–2003: Boston University, Chicago, Irvine, Northwestern, U. Pennsylvania, SED, Texas

2003–2004: Chicago, Choice Symposium, Dale Mortensen conference, IIOC, SITE

2004–2005: Chicago (Econ, Marketing), Northwestern (Econometrics, IO), SED, Stanford, Washington Univ. in SL

2005–2006: Bar-Ilan, Carlos III, Chicago (GSB applied micro), Cornell, ES World Congress, Haifa, IIOC, Illinois, Minnesota, MIT, Montreal / CIRANO, New York FRB, North Carolina, Pittsburgh, Tel Aviv, Toronto, Toulouse, UCLA, Vanderbilt, Virginia, Washington Univ. in SL

2006–2007: ASSA, Chicago, Duke, Harvard, Maryland, Michigan, NBER IO, NYU, Ohio State, Penn State, SITE / Stanford, Wisconsin

2007–2008: Caltech, Clemson, Columbia, Cowles / Yale, FTC, Iowa, Illinois at Chicago, IIOC, Johns Hopkins, Labor Market Dynamics, Northwestern, NYU, Paris I, Penn State, UCL

2008–2009: Aarhus School of Business, Bath University / Network of Industrial Economists, Boston University, Brown, Brown demand conference, Caltech, Chicago (econometrics, micro lunch), EC2 Structural Microeconometrics, FTC, Georgetown, HKUST, Institute for Computational Economics, LSE, Maryland, Michigan, Michigan State, Princeton / BYU labor conference, NBER IO, Northwestern, Portuguese Competition Authority, Quantitative Marketing and Economics, Rochester, Santa Clara, Society of Economic Dynamics, Stanford, Stanford GSB, Toulouse, UK Competition Commission, USC, Yale

2009–2010: American Economic Association, Arizona, Boston College, Brown, Chicago Fed, Clemson, Columbia, DePaul, Harvard / MIT, HEC Montreal, Illinois, Indiana, Iowa, Johns Hopkins, Michigan, Penn State, Pittsburgh, Rochester, Texas, UCLA, UCSD, UT Dallas, WashU Olin, Wharton, Yeshiva

2010–2011: American Economic Association, Bank of Canada, Boston College, Canadian Economic Association, Center for the Economic Analysis of Risk, Chicago/MFI matching conference, EC2 Identification, Frontiers of Productivity Estimation (Copenhagen), Industrial Organization Society, Irvine, Networks Workshop (Michigan), Princeton, Workshop on Buyer-Seller Networks (Warwick), Yale

2011–2012 Carlo Alberto (Turin), Central European University, Chicago, Chicago/MFI matching conference, Ecole Polytechnique (Paris), Einaudi (Rome), New Directions in Applied Microeconomics (Florence), Toronto, UCL

2012–2013 Economics of Information and Communications Technologies (Portugal), Northwestern, NYU, Penn, Penn State, Purdue, Texas, UCL conference on games, Wisconsin

2013–2014 Berkeley (economics), Berkeley (marketing), Berkeley (Haas economics), Boston College, Boston College demand conference, British Columbia (UBC), Caltech, Davis, Irvine, McMaster, San Diego (UCSD), Sciences Po, Simon Fraser, Stanford (econometrics), Stanford (GSB faculty lunch), Stanford (IO), UCLA, USC

2014–2015 Berkeley (marketing, SICS), Calgary conference, Duke Fuqua Strategy, Hong University of Science and Technology, ITAM, Johns Hopkins, Maryland, National University of Singapore, Rice, Texas, Yale conference on marketing/IO

2015–2016 Chinese University of Hong Kong, Chicago, Fudan, Illinois, Macau, Mannheim, New York University, Peking, Ohio State, Shanghai University of Finance and Economics, Toulouse, University of Southern California INET, Vanderbilt, Zhejiang, Zurich

2016–2017 American Economic Association, Boston College demand conference, Chicago Booth, Cleveland Federal Reserve, Cornell, Econometric Society Winter Meetings, Emory, Indiana, Michigan State, Missouri, Pittsburgh, Princeton, Syracuse, Texas A&M, USC

2017–2018 Bilkent, Columbia, CREST (Paris), University of Cyprus, Hitotsubashi, International Association for Applied Econometrics, University College London, Management Science conference in Chile, University of Michigan, Microsoft Research New England, Microsoft Office of the Chief Economist, University of Nagoya, National Graduate Institute for Policy Studies (Tokyo), University of Osaka, Stanford GSB conference, University of Tokyo, Vanderbilt

2018–2019 Allied Social Sciences Association (three original papers, one discussion), Arizona State, Chinese Meeting of the Econometric Society (Fudan), Fundação Getúlio Vargas Rio, Jinan University (Center for Microdata Practice, Firms in Emerging Economies), Pontifical Catholic University of Rio de Janeiro, University of Arizona, University of Houston, University of Minnesota, University of California at Santa Cruz, University of Chile

2019–2020 Australian National University, Duke, Federal Communications Commission, Melbourne, Monash, New South Wales, Stony Brook, Sydney (several other talks cancelled due to COVID-19)

2020–2021 Allied Social Sciences Association, Bristol/Warwick joint seminar, Johns Hopkins

2021–2022 Boston College, MIT, Sciences Po, Southern Economic Association, Stanford, University of Chicago, University of Tokyo, University of Washington

Refereeing (most multiple times)

American Economic Journal: Applied Economics

American Economic Journal: Macroeconomics

American Economic Journal: Microeconomics

American Economic Review

American Journal of Agricultural Economics

Annals of Economics and Statistics

Canadian Journal of Economics

Econometric Theory

Econometrica

Econometrics Journal

Economic Inquiry

Economic Journal

Economic Theory

Economica

Economics Letters

European Economic Review

Industrial Relations

Information Economics and Policy

International Economic Review

International Journal of Industrial Organization

IZA World of Labor

Journal of the American Statistical Association

Journal of Applied Econometrics

Journal of Business and Economic Statistics

Journal of Econometrics

Journal of Economic Behavior and Organization

Journal of Economic Literature

Journal of Economics & Management Strategy

Journal of Finance

Journal of Human Resources

Journal of Industrial Economics

Journal of Industry Competition and Trade

Journal of Institutional and Theoretical Economics

Journal of Labor Economics

Journal of Law and Economics

Journal of Marketing Research

Journal of Mathematical Economics

Journal of Political Economy
Labour Economics
Management Science
Marketing Science
Mathematics of Operations Research
National Research Council
National Science Foundation
Oxford Bulletin of Economics and Statistics
Production and Operations Management
Quantitative Economics
Quantitative Marketing and Economics
Quarterly Journal of Economics
RAND Journal of Economics
Review of Economic Dynamics
Review of Economics and Statistics
Review of Economic Studies
Strategic Management Journal
Theoretical Economics