

Robert L. Bray

curriculum vitae

Academic Positions

- 2016– Associate Professor of Managerial Economics and Decision Sciences
Kellogg School of Management, Northwestern University, Evanston, IL
- 2013–16 Assistant Professor of Managerial Economics and Decision Sciences
Kellogg School of Management, Northwestern University, Evanston, IL
- 2012–13 Donald P. Jacobs Scholar of Managerial Economics and Decision Sciences
Kellogg School of Management, Northwestern University, Evanston, IL

Education

- 2007–12 Stanford Graduate School of Business, Stanford, CA
PhD, Operations, Information, and Technology
- 2002–06 University of California at Berkeley, Berkeley, CA
B.S. Industrial Engineering Operations Research
Graduated ‘High Honors’

Research

Publications

- 2012 [1] Information Transmission and the Bullwhip Effect: An Empirical Investigation.
Coauthor: Haim Mendelson
Outlet: *Management Science*, 58.5 (2012): 860-875
Finalist: *Management Science* Best Paper in Operations Management Award, 2014
Finalist: *Management Science* Best Paper in Operations Management Award, 2015
Finalist: George Nicholson Student Paper Competition, INFORMS, 2011
Finalist: MSOM Student Paper Competition, MSOM Society, 2011
Winner: Best Student Paper Competition, POMS Supply Chain College, 2011
- 2015 [2] Production Smoothing and the Bullwhip Effect
Coauthor: Haim Mendelson
Outlet: *Manufacturing & Service Operations Management*, 17.2 (2015): 208-220
Finalist: *M&SOM* Best Paper Award, 2018
Finalist: *M&SOM* Best Paper Award, 2017
- 2016 [3] Multitasking, Multi-Armed Bandits, and the Italian Judiciary
Outlet: *Manufacturing & Service Operations Management*, 18.4 (2016): 545-558
Coauthors: Decio Coviello, Andrea Ichino, and Nicola Persico
- 2018 [4] Ration Gaming and the Bullwhip Effect
Coauthors: Yuliang Yao, Yongrui Duan, Jiazhen Huo
Outlet: Forthcoming at *Operations Research*
- 2018 [5] Supply Chain Proximity and Product Quality
Coauthors: Juan Serpa, Ahmet Colak
Outlet: Forthcoming at *Management Science*
- 2018 [6] Strong Convergence and Dynamic Economic Models
Outlet: Forthcoming at *Quantitative Economics*

Research (continued)

- 2018 [7] Markov Decision Processes with Exogenous Variables
Outlet: Forthcoming at *Management Science*
- Working Papers*
- 2019 [8] Why Do Auto Manufacturers Initiate Recalls? A Structural Econometric Game
Coauthor: Ahmet Colak
Outlet: Revise and resubmit at *Management Science*
- 2019 [9] Operational Transparency: Showing When Work Gets Done
Outlet: Under review at *Manufacturing & Service Operations Management*
Winner: MSOM Data Driven Research Challenge, MSOM Society, 2018
- 2019 [10] Unnesting the Fixed Point in Dynamic Program Estimation
- 2019 [11] Menu Costs and the Bullwhip Effect: Supply Chain Implications of Dynamic Pricing
Outlet: Under review at *Operations Research*
Coauthor: Ioannis Stamatopoulos
- Cases*
- 2011 [12] The Kindle
Coauthor: Haim Mendelson
Outlet: Stanford GSB's e-commerce class

Awards

- 2018 Winner, MSOM Data Driven Research Challenge, MSOM Society
- 2018 Finalist, *Manufacturing & Service Operations Management* Best Paper Award
- 2017 *Manufacturing & Service Operations Management* Meritorious Service Award
- 2017 Finalist, *Manufacturing & Service Operations Management* Best Paper Award
- 2016 Outstanding Reviewer Recognition, Production & Operations Management Society
- 2015 Finalist, *Management Science* Best Paper in Operations Management Award
- 2014 Finalist, *Management Science* Best Paper in Operations Management Award
- 2011 Winner, Best Student Paper Competition, Production and Operations Management Society, College of Supply Chain Management
- 2011 Finalist, George Nicholson Student Paper Competition, INFORMS
- 2011 Finalist, MSOM Student Paper Competition, MSOM Society
- 2007–12 Doctoral Fellowship, Stanford GSB
- 2005 Undergraduate Research Opportunities Grant, UC Berkeley
- 2002-04 Alumni Scholarship for Leadership, UC Berkeley

Teaching

Courses

- 2013– Core Operations Management
Role: Instructor
Institution: Kellogg School of Management
Level: MBA
- 2014 Estimating Dynamic Programs
Role: Course creator and instructor
Institution: Kellogg School of Management
Level: PhD
- 2009–11 Introduction to Operations Management
Role: Part time lecturer
Institution: Stanford GSB
Level: PhD
- 2009–11 Electronic Commerce
Role: Teaching assistant
Institution: Stanford GSB
Level: MBA
- 2006 Discrete Event Simulation
Role: Teaching assistant
Institution: UC Berkeley College of Engineering
Level: Undergraduate

Advising

- 2013–17 PhD advisor to Ahmet Colak, at Kellogg
Placement: Clemson University, Operations Management
- 2013 PhD committee member for Seyed Emadi, at Kellogg
- 2018 PhD committee member for Serasu Duran, at Kellogg
- 2018 PhD committee member for Nil Karacaoglu, at Kellogg
- 2018 PhD committee member for Simin Li, at Kellogg
- 2018 PhD committee member for Yue Yin, at Kellogg

Professional Experience

- 2016– Senior editor at *Production and Operations Management*
- 2015 Co-chair of the MSOM Supply Chain SIG
- 2013 Keynote speaker at E2Open's supply chain round-table
- 2009–10 President of PhD Association at Stanford GSB
- 2006–07 Semiconductor manufacturing consultant at Leachman & Associates
- 2005 Manufacturing engineering co-op at Intel
- 2005 Industrial engineering co-op at Disneyland
- 2004–05 Research assistant at Cohn Visual Detection Laboratory, UC Berkeley

Professional Experience (continued)

- 2009– Referee
Management Science
Operations Research
Manufacturing & Service Operations Management
Production and Operations Management
Mathematics of Operations Research
Journal of Operations Management
International Journal of Production Research
Econometrica
Quantitative Economics
IIE Transactions on Healthcare Systems Engineering
MSOM student paper competition
MSOM supply chain SIG
MSOM services SIG
POMS Supply Chain Student Paper Competition
INFORMS interactive poster session
- 2004–2014 Academic programs
Kellogg Faculty Immersion Trip to Brazil
Chicago-Argonne Initiative for Computational Economics
Georgia Tech East Asia Industrial Engineering Program

Invited Presentations

- 2010-11 Information Transmission and the Bullwhip Effect
Caterpillar Headquarters
Wharton Workshop on Empirical Research in OM
- 2011-14 Production Smoothing and the Bullwhip Effect
Marshall School of Business, University of Southern California
Columbia Business School
Fuqua School of Business, Duke University
Harvard Business School
Kellogg Graduate School of Management, Northwestern University
Rady School of Management, University of California, San Diego
Stern School of Business, New York University
Wharton School, University of Pennsylvania
Wharton Workshop on Empirical Research in OM
MSOM Supply Chain SIG (2012, 2014)
- 2015 Multitasking, Multi-Armed Bandits, and the Italian Judiciary
Lehigh University College of Business and Economics
Wharton Workshop on Empirical Research in OM
- 2015 Why Do Auto Manufacturers Initiate Recalls? A Structural Econometric Game
Lubar School of Business, University of Wisconsin, Milwaukee
- 2016-18 Strong Convergence and the Estimation of Markov Decision Processes
University of Calgary Banff Empirical Microeconomics Workshop
Northwestern University

Invited Presentations (continued)

- 2017-18 Ration Gaming and the Bullwhip Effect
 McCombs School of Business, University of Texas, Austin
 Desautels Faculty of Management, McGill University
 CIRRELT, Montréal
 Robert Smith School of Business, University of Maryland
 MSOM Supply Chain SIG
 Fisher College of Business, Ohio State University
 Baruch College, The City University of New York
 SC Johnson College of Business, Cornell University
 HEC Montréal Workshop on Industrial Organization
- 2018 Operational transparency: Showing when work gets done
 Emory ISOM Workshop on Empirical Research

Press

- 2013 Whipping the Supply Line into Shape
 Outlet: KelloggInsight
- 2015 A Smarter Way to Schedule
 Outlet: KelloggInsight
- 2018 A Counterintuitive Way to Keep Shelves Stocked and Prices Down
 Outlet: KelloggInsight