

Mohammad Fazel-Zarandi

CONTACT INFORMATION	MIT Sloan School of Management Massachusetts Institute of Technology Cambridge, MA	Website: http://mitmgmtfaculty.mit.edu/mzarandi Email: fazel@mit.edu
ACADEMIC POSITION	MIT Sloan School of Management Senior Lecturer in Operations Research and Statistics	July 2018 - present
	Yale School of Management Postdoctoral Associate and Lecturer	Sept. 2016 - June 2018
EDUCATION	Rotman School of Management, University of Toronto, Canada Ph.D., Operations Research	2016
	Department of Mechanical and Industrial Engineering, University of Toronto, Canada M.S., Industrial Engineering	2011
	Department of Industrial Engineering, Amirkabir University of Technology, Iran B.S., Industrial Engineering	2008
RESEARCH INTERESTS	Analytics, Machine Learning, Mathematical Modeling, Decision-Making, Public Policy	
PUBLICATIONS	<ol style="list-style-type: none">1. “Race, Guns, COVID-19, or Something Else: Why Did US Urban Homicide Spike in 2020?” with A. Barnett, under review, 20222. “Prescriptive Machine Learning for Public Policy: The Case of Immigration Enforcement” with D. Bertsimas, under 2nd round of review at <i>Operations Research</i>, 2021.3. “Early Detection of Opioid Over-Procurement: A Machine Learning Approach,” with D. Bertsimas, under major revision at <i>M&SOM</i>, 2021.4. “Interpretable Machine Learning for Policy Analysis: The Case of National Immigration Policy,” with D. Bertsimas, under review at <i>M&SOM</i>, 2021.5. “Can Firms Benefit from Competition?,” with I. Horstmann and F. Mathewson, <i>International Journal of Industrial Organization</i>, 76, 102740, 2021.6. “Almost Robust Discrete Optimization,” with O. Baron, O. Berman, V. Roshanaei, <i>European Journal of Operational Research</i>, 276(2), 451-465, 2020.7. “Truthful Cheap Talk: Why Operational Flexibility May Lead to Truthful Communication,” with O. Berman and D. Krass, <i>Management Science</i>, 65(4), 1624-1641, 2019.8. “Approximating the First-Come, First-Served Stochastic Matching Model with Ohm’s Law,” with E. Kaplan, <i>Operations Research</i>, 66(5), 1423-1432, 2018.9. “The Number of Undocumented Immigrants in the United States: Estimates Based on Demographic Modeling with Data from 1990-2016,” with E. Kaplan and J. Feinstein, <i>PLOS ONE</i>, 13(9): e0201193, 2018.10. “Solving a Stochastic Facility Location/Fleet Management Problem with Logic-Based Benders Decomposition,” with O. Berman and J.C. Beck, <i>IIE Transactions</i>, 45(8), 896-911, 2013.11. “Using Logic-Based Benders Decomposition to Solve the Capacity and Distance Constrained Plant Location Problem,” with J.C. Beck, <i>INFORMS Journal on Computing</i>, 399-415, 2012.	

12. “Solving a location-allocation problem with logic-based Benders’ decomposition.” with J.C. Beck, *Proceedings of the International Conference on Principles and Practice of Constraint Programming*, 344-351, 2009.

- WORK IN PROGRESS
- “Trends in Urban Homicide,” with A. Barnett.
 - “Prescriptive Machine Learning for Personalized Unemployment Insurance.”
 - “Policy Design for Immigration Enforcement: An Operational Perspective.”

TEACHING
EXPERIENCE

MIT Sloan School of Management

- Analytics of Operations Management, MBA elective Fall 2021
- Stochastic Models in Business Analytics, Undergraduate Fall 2021
- Statistical Thinking and Data Analysis , Undergraduate Spring 2019, 2020, 2021
- Engineering Statistics and Data Science, MBA/MS core Summer 2019

Yale School of Management

- Revenue Management, MBA elective Spring 2018
- Supply Chain Management, MBA elective Spring 2017, Fall 2017

Rotman School of Management

- Operations Management, Undergraduate Fall 2015

SELECTED MEDIA
COVERAGE

Op-Eds

- “Prior estimates of undocumented immigrants in the US were way off,” *The Hill*, Oct. 26, 2018.
- “How many undocumented immigrants there really are, and why the number matters,” *New York Daily News*, Oct. 1, 2018.

Other coverage

- *Boston Globe*: “Undocumented population is twice as large as previously thought.”
- *Los Angeles Times*: “Number of immigrants in U.S. illegally could be double the widely accepted estimates, study suggests.”
- *Bloomberg*: “MIT-Yale Study Doubles Estimates of U.S. Undocumented Immigrants.”
- *New York Times*: “Trump’s Statistics About Undocumented Immigrants Are Questioned by Experts.”
- *Fox News*: “Number of illegal immigrants in US may be twice what’s reported: Yale-MIT study.”
- *The Hill*: “Yale, MIT study: 22 million, not 11 million, undocumented immigrants in US.”
- *Politico*: “New study estimates 22M undocumented immigrants reside in the U.S.”
- *Daily Mail*: “Study finds there are over 22million undocumented immigrants in the US - more than double previous estimate.”
- *Washington Post*: “President Trump tweets nonsensical figures on illegal immigration.”
- *NPR*: “Yale-MIT study suggests number of undocumented immigrants may be double earlier estimates, we discuss methodology.”

- *Mother Jones*: “A Study Says the Undocumented Population May Be Twice as Big as We Thought. Be Skeptical.”
- *National Review*: “Yale Study: Twice as Many Undocumented Immigrants as Previously Thought in U.S.”

AWARDS	Rotman Fellowship	2011-2015
	Martin Evans Scholarship	2012-2014
	Ontario Graduate Scholarship	2011-2012
	University of Toronto Fellowship	2009-2010

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| INVITED TALKS | • Sloan School of Management, Massachusetts Institute of Technology |
| | • Operations Research Center, Massachusetts Institute of Technology |
| | • Yale School of Management, Yale University |
| | • Heinz College of Information Systems and Public Policy, Carnegie Mellon University |
| | • H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology |
| | • Naveen Jindal School of Management, University of Texas at Dallas |
| | • Rotman School of Management, University of Toronto |

PERSONAL	Citizenship: Canada
	Languages: English and Persian