

Mohammad M. Fazel-Zarandi

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| 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 |
| RESEARCH INTERESTS | Machine Learning, Decision-Making, Mathematical Modeling, Public Policy | |
| PUBLICATIONS | <ol style="list-style-type: none">1. "Prescriptive Machine Learning for Public Policy: The Case of Immigration Enforcement" with Dimitris Bertsimas, Under 2nd review at <i>Operations Research</i>, 2021.2. "Interpretable Machine Learning for Policy Analysis: The Case of National Immigration Policy," with Dimitris Bertsimas, Under review, 2021.3. "Early Detection of Opioid Over-Procurement: A Machine Learning Approach," with Dimitris Bertsimas and Joshua Ivanhoe, Major revision at <i>M&SOM</i>, 2021.10. "Can Firms Benefit from Competition?," with Ig Horstmann and Frank Mathewson, <i>International Journal of Industrial Organization</i>, Forthcoming, 2021.4. "Approximating the First-Come, First-Served Stochastic Matching Model with Ohm's Law," with Edward Kaplan, <i>Operations Research</i>, 66(5), 1423-1432, 2018.5. "The Number of Undocumented Immigrants in the United States: Estimates Based on Demographic Modeling with Data from 1990-2016," with Edward Kaplan and Jonathan Feinstein, <i>PLOS ONE</i>, 13(9): e0201193, 2018.6. "Truthful Cheap Talk: Why Operational Flexibility May Lead to Truthful Communication," with Oded Berman and Dmitry Krass, <i>Management Science</i>, 65(4), 1624-1641, 2019.7. "Almost Robust Discrete Optimization," with O. Baron, O. Berman, V. Roshanaei, <i>European Journal of Operational Research</i>, 276(2), 451-465, 2019.8. "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, 2013.9. "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, 2012.11. "Solving a location-allocation problem with logic-based Benders' decomposition." with J.C. Beck, <i>Proceedings of the International Conference on Principles and Practice of Constraint Programming</i>, 344-351, 2009. | |

OTHER PUBLICATIONS

- “ 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.

TEACHING EXPERIENCE

MIT Sloan School of Management

- Statistical Thinking and Data Analysis , Undergraduate course Spring 2019, 2020
- Engineering Statistics and Data Science, MBA/MS core course Summer 2019

Yale School of Management

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

Rotman School of Management

- Operations Management, Undergraduate course Fall 2015

SELECTED MEDIA 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

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

REFERENCES

Professor Dimitris Bertsimas

MIT Sloan School of Management
Massachusetts Institute of Technology
email: dbertsim@mit.edu

Professor Edward Kaplan

Yale School of Management
Yale University
email: edward.kaplan@yale.edu

Professor Oded Berman

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University of Toronto
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