Hamsa Bastani

Wharton School, University of Pennsylvania
Operations, Information & Decisions (OID) Group
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Employment

Assistant Professor, Wharton School, University of Pennsylvania
Operations, Information & Decisions (OID), 2018 – present

Herman Goldstine Postdoctoral Fellow, IBM Research
Math for AI, 2017-2018

Education

Stanford University
Ph.D. in Electrical Engineering, 2012-2017

Harvard University
A.M. in Physics, 2011-2012
A.B. *summa cum laude* in Physics and Mathematics, 2008-2012

Working Papers

Adaptive Clinical Trial Designs with Surrogates: When Should We Bother? (with Arielle Anderer and John Silberholz)
1st Place, Pierskalla Award for Best Paper in Healthcare (2019)
Major Revision, ***Management Science***

Meta Dynamic Pricing: Learning Across Experiments
(with David Simchi-Levi and Ruihao Zhu)
Major Revision, ***Management Science***

Are Bans Effective despite Limited Enforcement? Evidence from the High Seas (with Joann de Zegher)
People's Choice Award, Early-Career Sustainable OM Workshop (2019)
Major Revision, ***Management Science***

Predicting with Proxies: Transfer Learning in High Dimension
Major Revision, ***Management Science***

Learning Personalized Product Recommendations with Customer Disengagement (with Pavithra Harsha, Georgia Perakis and Divya Singhvi)
2nd Place, Service Science Best Paper Award (2019)
Hon. Mention, POMS Best Student Paper in Supply Chain (D. Singhvi, 2019)
Major Revision, ***M&SOM***

Interpreting Predictive Models for Human-in-the-Loop Analytics

(with Osbert Bastani and Carolyn Kim)
Finalist, Pierskalla Award for Best Paper in Healthcare (2018)
Preliminary version in FATML Workshop (2017)

Mostly Exploration-Free Algorithms for Contextual Bandits
(with Mohsen Bayati and Khashayar Khosravi)
Major Revision, ***Management Science***

Analysis of Medicare Pay-for-Performance Contracts
(with Mohsen Bayati, Mark Braverman, Ramki Gummadi and Ramesh Johari)
Preliminary version in EC Mechanism Design for Social Good Workshop (2017)

Published Papers

Online Decision-Making with High-Dimensional Covariates
(with Mohsen Bayati)
1st Place, Pierskalla Award for Best Paper in Healthcare (2016)
1st Place, George Nicholson Student Paper Competition (2016)
1st Place, MSOM Student Paper Competition (2016)
1st Place, IBM Service Science Best Student Paper Award (2016)
Accepted in ***Operations Research***

Evidence of Upcoding in Pay-for-Performance Programs
(with Joel Goh and Mohsen Bayati)
1st Place, Health Applications Society Best Student Paper Award (2015)
Management Science (2018)

Other Publications

Exploring the Causal Relationships between Initial Opioid Prescriptions and Outcomes
(with J. Zhang, V. Iyengar, D. Wei, B. Vinzamuri, A. Macalalad, A. Fischer, G. Yuen-Reed, A. Mojsilović, and K. Varshney)
AMIA Workshop on Data Mining for Medical Informatics (2017)

Multiplex coherent anti-Stokes Raman scattering (MCARS) for chemically sensitive, label-free flow cytometry
(with C. Camp, S. Yegnanarayanan, A. Eftekhar, and A. Adibi)
Optics Express (2009)

Creating Optical Vortex Modes with a Single Cylinder Lens
(with M. Cohen and J. Noe)
Proceedings of *SPIE* (2010)

Students

Arielle Anderer, Wharton OID
Pia Ramchandani, Wharton OID
Kan Xu, Penn Econ
Khashayar Khosravi, Stanford EE (co-author, advised by M. Bayati)
Park Sinchaisri, Wharton OID (co-author, advised by G. Allon)

Divya Singhvi, MIT ORC (co-author, advised by G. Perakis)
Ruihao Zhu, MIT IDSS (co-author, advised by D. Simchi-Levi)

Teaching

Wharton OID, University of Pennsylvania
Instructor, Introduction to Management Science (OIDD 321), 2018-2019

Graduate School of Business, Stanford University
TA, Business Intelligence from Big Data (OIT 367), 2016
TA, Data for Action (OIT 536), 2015

Harvard College
TA, Quantum Mechanics (Phys 143a), 2011
TA, Linear Algebra & Real Analysis (Math 25), 2009-2010

Invited Talks

Utah Operations Conference, February 2020
Chicago Booth OM seminar, February 2020
MIT IDSS Data Science Lab, November 2019
NYU Stern OM seminar, November 2019
UC Irvine Operations & Decision Technologies, October 2019
UC Irvine Algorithms, Combinatorics & Optimization Center, October 2019
Wharton Empirical Research in OM Workshop, September 2019
Information & Learning Workshop, IESE, September 2019
ISOM Workshop, Goizueta Business School, Emory, August 2019
Healthcare SIG, MSOM Conference, June 2019
Healthcare & Service Operations Workshop, CUHK Shenzhen, June 2019
Naveen Jindal School of Management, UT Dallas, May 2019
Wharton OID, April 2019
IMA Data-Driven Supply Chain Mgmt (Applied) Workshop, December 2018
IMA Data-Driven Supply Chain Mgmt (Theory) Workshop, October 2018
Warren Center for Network & Data Sciences, U Penn, October 2018
IBM Research Math for AI, June 2018
IDinsight, May 2018
MIT ORC IAP Seminar on OR for Social Impact, January 2018
MIT IDSS Data Science Lab, December 2017
Judge Business School, University of Cambridge, July 2017
IBM Research Applied Probability Seminar, June 2017
Cornell Tech, March 2017
Stanford-Berkeley Health Economics Workshop, February 2017
Anderson School of Management, UCLA, February 2017
Fuqua School of Business, Duke, February 2017
Marshall School of Business, USC, February 2017
Northwestern IEMS, February 2017
Yale School of Management, February 2017
Harvard Business School, January 2017
Columbia IEOR / DRO, January 2017

Ross School of Business, University of Michigan, January 2017
INSEAD, January 2017
Kellogg School of Management, Northwestern, January 2017
Krannert School of Management, Purdue, January 2017
Chicago Booth OM, January 2017
Cornell ORIE, December 2016
Wharton OID, University of Pennsylvania, December 2016
Kelley School of Business, Indiana University, December 2016
London Business School, December 2016
Katz School of Business, University of Pittsburgh, December 2016
MIT Sloan OM, November 2016
Stanford GSB OIT, November 2016
Biostatistics Workshop, Stanford, October 2016
Med-X Conference, Stanford Medical School, September 2016
Healthcare SIG, MSOM Conference, July 2016
Cornell ORIE, December 2015
Cornell ORIE Young Scholars Workshop, October 2015
Wharton Empirical Research in OM Workshop, September 2014

Awards

1st Place, Pierskalla Award for Best Paper in Healthcare, 2019
2nd Place, Service Science Best Paper Award, 2019
People's Choice Award, Early-Career Sustainable OM Workshop, 2019
Finalist, Pierskalla Award for Best Paper in Healthcare, 2018
1st Place, Pierskalla Award for Best Paper in Healthcare, 2016
1st Place, George Nicholson Student Paper Competition, 2016
1st Place, MSOM Student Paper Competition, 2016
1st Place, IBM Service Science Best Student Paper Award, 2016
1st Place, Health Applications Society Best Student Paper Award, 2015
National Science Foundation Fellow, 2012-2017
Stanford Department Fellowship in Electrical Engineering, 2012-2013
Intel Science Talent Search Finalist, 2008

Professional Service

Program Committee, EC Conference, 2020
Program Committee, AAAI Conference on Artificial Intelligence, 2020
Wharton Dean's Advisory Council, 2019-2020
Judge, POMS Best Healthcare Ops Mgmt Paper Award, 2019
Judge, Elwood S. Buffa Doctoral Dissertation Award, 2019
Area Chair, Mechanism Design for Social Good Workshop, 2019
Committee Member, George Nicholson Student Paper Competition, 2019-2020
Judge, MSOM Student Paper Competition, 2019
Committee Member, Revenue Management & Pricing Conference, 2019
Judge, Healthcare Applications Society Student Paper Competition, 2019
Program Committee, EC Mechanism Design for Social Good Workshop, 2018
Judge, Healthcare SIG in MSOM Conference, 2018-2019
Meritorious Service Award for *Management Science*, 2018

Judge, Service Science Best Cluster Paper Award, 2017
Co-Chair, Pierskalla Award for Best Paper in Healthcare, 2017
Speaker, CMU YinzOR Student Conference, 2017
Reviewer for *Management Science*, *Operations Research*, *M&SOM*, *Journal of the Royal Statistical Society: Series B*, and *Annals of Statistics*

Languages and Skills

English (native), Tamil (native), French (beginner)
R, Stata, LaTeX, Matlab