Hamsa Bastani

Wharton School, University of Pennsylvania Operations, Information & Decisions (OID) Group 557 Jon M. Huntsman Hall hamsab@wharton.upenn.edu hamsabastani.github.io (215) 573-5365

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

Research Interests

Transfer learning, bandits, high-dimensional statistics, interpretability,

mechanism design for social good

Working Papers

Can Policies with Limited Enforcement Reduce Harm? Evidence

from Transshipment Bans

(with Joann de Zegher)

Preliminary version in Early-Career Sustainable OM Workshop (2019)

Predicting with Proxies

Preliminary version in IMA Data-Driven Supply Chain Mgmt Workshop (2018)

Sequential Learning of Product Recommendations with Customer Disengagement

(with Pavithra Harsha, Georgia Perakis and Divya Singhvi)

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 KDD FATML Workshop (2017)

Mostly Exploration-Free Algorithms for Contextual Bandits

(with Mohsen Bayati and Khashayar Khosravi)

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)

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)

Published Papers

Evidence of Upcoding in Pay-for-Performance Programs

(with Joel Goh and Mohsen Bayati)

1st Place, Health Applications Society Best Student Paper Award (2015)

Forthcoming in *Management Science*

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 (advisor)

Pia Ramchandani, Wharton (advisor)

Khashayar Khosravi, Stanford (co-author, advised by M. Bayati)

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

Teaching

Wharton OID, University of Pennsylvania

Instructor, Introduction to Management Science (OIDD 321), 2018

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

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 Seminar, June 2018

IDinsight, May 2018

Data Science Lab, MIT IDSS, 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

Fugua 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

Booth School of Business, University of Chicago, January 2017

Cornell ORIE, December 2016

Wharton, 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, November 2016

Stanford Graduate School of Business, November 2016

Stanford Biostatistics Workshop, 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 Workshop for Empirical Research in OM, September 2014

Awards and Fellowships

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 Mechanism Design for Social Good Workshop, 2018 Program Committee, KDD ML for Medicine & Healthcare Workshop, 2018

Judge, Healthcare SIG in MSOM Conference, 2018

Speaker, MIT ORC IAP Seminar on OR for Social Impact, 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, and M&SOM, 2017–

Meritorious Service Award for Management Science, 2018

Languages and Skills

English (native), Tamil (native), French (beginner)

R, Stata, LATEX, Matlab