Hamsa Bastani

IBM Thomas J. Watson Research Math for AI Group

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Employment Herman Goldstine Postdoctoral Fellow, IBM Research

Math for AI, 2017-2018

Assistant Professor, Wharton School, University of Pennsylvania

Operations, Information & Decisions (OID), 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 Predicting with Proxies

Working paper

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

(with Osbert Bastani and Carolyn Kim)

Previously titled Interpreting Blackbox Models via Model Extraction

Preliminary version in FATML Workshop (2017)

Mostly Exploration-Free Algorithms for Contextual Bandits

(with Mohsen Bayati and Khashayar Khosravi)

Working paper

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)

Working paper

Analysis of Medicare Pay-for-Performance Contracts

(with Mohsen Bayati, Mark Braverman, Ramki Gummadi and Ramesh Johari)

Preliminary version in Mechanism Design for Social Good Workshop (2017)

Working paper

Evidence of Upcoding in Pay-for-Performance Programs

(with Joel Goh and Mohsen Bayati)

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

Accepted in *Management Science*

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

Data Science Lab, MIT IDSS, December 2017

Judge Business School, University of Cambridge, July 2017

IBM Research, 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

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 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

1st Place, Pierskalla Award for Best Paper in Healthcare, 20161st 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 Member, Mechanism Design for Social Good Workshop, 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

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)

Zero-Shot Learning Through Cross-Modal Transfer

(with R. Socher, M. Ganjoo, O. Bastani, C. Manning, and A. Ng)

Oral presentation at ICLR Workshop Track (2013)

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)

Languages and Skills

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

R, Stata, LATEX, Matlab