

# Hamsa Bastani

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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

**Research Interests**     Theory: transfer learning, bandits, high-dimensional statistics  
Applications: healthcare, revenue management, sustainability

**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. Eftekhari, 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 OIDD, 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  
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 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

*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, L<sup>A</sup>T<sub>E</sub>X, Matlab