Hamsa Bastani

Wharton School, University of Pennsylvania
Operations, Information & Decisions (OID) Group
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Academic Position	**Assistant Professor, Wharton School, University of Pennsylvania**

Assistant Professor, Wharton School, University of Pennsylvania
Operations, Information & Decisions (OID), 2018 – present
  - *Affiliate*, Warren Center for Networks & Data Sciences
  - *Affiliate*, Penn Research in Machine Learning (PRiML)
  - *Senior Fellow*, Leonard Davis Institute for Health Economics

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

Journal Papers

Predicting with Proxies: Transfer Learning in High Dimension
H. Bastani
Management Science (2020)

Mostly Exploration-Free Algorithms for Contextual Bandits
H. Bastani, M. Bayati and K. Khosravi
Management Science (2020)

Online Decision-Making with High-Dimensional Covariates
H. Bastani and M. 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)
Operations Research (2020)

Evidence of Upcoding in Pay-for-Performance Programs
H. Bastani, J. Goh and M. Bayati
1st Place, Health Applications Society Best Student Paper Award (2015)
Management Science (2019)

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

Under Review	**Meta Dynamic Pricing: Transfer Learning Across Experiments** H. Bastani, D. Simchi-Levi and R. Zhu *Minor Revision*, **Management Science**
	Adaptive Clinical Trial Designs with Surrogates: When Should We Bother? A. Anderer, H. Bastani and J. Silberholz *1st Place*, Pierskalla Award for Best Paper in Healthcare (2019) *1st Place*, MSOM Student Paper Competition (Anderer, 2020) *Finalist*, Public Sector in Operations Best Paper Award (2020) *Major Revision*, **Management Science**
	Are Bans Effective under Limited Monitoring? Evidence from High Seas Management, H. Bastani and J. F. de Zegher *People's Choice Award*, Early-Career Sustainable OM Workshop (2019) *Major Revision*, **Management Science**
	Learning Personalized Product Recommendations with Customer Disengagement, H. Bastani, P. Harsha, G. Perakis and D. Singhvi *2nd Place*, Service Science Best Paper Award (2019) *Hon. Mention*, POMS Best Student Paper in Supply Chain (Singhvi, 2019) *Major Revision*, **M&SOM**
	Responsible Sourcing: The First Step is the Hardest P. Ramchandani, H. Bastani and K. Moon *People's Choice Award*, Early-Career Sustainable OM Workshop (2020)
Book Chapters	**Proceed with Care: Integrating Predictive Analytics with Patient Decision-Making**, H. Bastani and P. Shi Draft invited chapter for **Modeling for Health: Making Changes** (editors: Sze-Chuan Suen, Eva Enns and David Scheinker)
	Applied Machine Learning in Operations Management H. Bastani, D. J. Zhang and H. Zhang Draft invited chapter for **Innovative Technology at the Interface of Finance and Operations** (editors: Vlad Babich, John Birge and Gilles Hilary)
Refereed Conference Papers	**Exploring the Causal Relationships between Initial Opioid Prescriptions and Outcomes**, J. Zhang, V. Iyengar, D. Wei, B. Vinzamuri, H. Bastani, A. Macalalad, A. Fischer, G. Yuen-Reed, A. Mojsilović, and K. Varshney AMIA Workshop on Data Mining for Medical Informatics (2017)
	Interpretability via Model Extraction O. Bastani, C. Kim and H. Bastani *Finalist*, Pierskalla Award for Best Paper in Healthcare FATML Workshop on Fairness, Accountability, and Transparency (2017)
	Analysis of Medicare Pay-for-Performance Contracts H. Bastani, M. Bayati, M. Braverman, R. Gummadi and R. Johari

EC Workshop on Mechanism Design for Social Good (2017)

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

Working Papers	**Word Embeddings for New Domains via Group-Sparse Transfer Learning** K. Xu, H. Bastani and O. Bastani

Word Embeddings for New Domains via Group-Sparse Transfer Learning
K. Xu, H. Bastani and O. Bastani

The Value of Transfer Learning in Retailing: Theory and Empirical Evidence, H. Bastani, Y. Jiang, J. Sun and D. J. Zhang

Country-Scale Bandits for Targeted COVID-19 Testing
H. Bastani, K. Drakopoulos, V. Gupta and J. Vlachogiannis

Learning Best Practices: Can Machine Learning Improve Human Decision-Making? H. Bastani, O. Bastani and W. Sinchaisri

Students

Arielle Anderer, Wharton OID
  - Advisor
Pia Ramchandani, Wharton OID
  - Advisor
Kan Xu, Penn Economics
  - Advisor
Maya Balakrishnan, HBS TOM (primary advisor: H. Lakkaraju)
  - Co-author
Wichinpong Sinchaisri, Wharton OID (primary advisor: G. Allon)
  - Co-author
Ruihao Zhu, MIT IDSS (primary advisor: D. Simchi-Levi)
  - Co-author, thesis committee member
Divya Singhvi, MIT ORC (primary advisor: G. Perakis), grad. in 2020
  - Co-authored job market paper
  - *Initial Placement:* Assistant Professor at NYU Stern
Khashayar Khosravi, Stanford EE (primary advisor: M. Bayati), grad. in 2019
  - Co-authored job market paper
  - *Initial Placement:* Postdoctoral fellow at Google

Teaching

Wharton OID, University of Pennsylvania
Instructor, Introduction to Management Science (OIDD 321), 2018 – present
  - Recipient of Wharton Teaching Excellence Award in 2019 and 2020

Instructor, Bandits, RL and Transfer Learning (OIDD 941), 2021
  - Designed new Ph.D. course

Invited Talks	**2020:** Yale School of Management; Chicago Booth OM; U of Maryland DO&IT; Purdue Krannert; Cornell Johnson OTIM; Utah Ops Conference; Facebook Adaptive Experimentation Workshop; Simons Institute for the Theory of Computing; Keynote Speaker for KDD Workshop on Applied Data Science for Healthcare; Invited Speaker for NeurIPS Workshop on Consequential Decision-Making; INFORMS Health Applications Society Tutorial; Wharton Analytics Webinar

2019: NYU Stern OM; MIT IDSS Data Science Lab; UC Irvine Operations & Decision Technologies; UC Irvine Algorithms, Combinatorics & Optimization Center; UT Dallas Naveen Jindal OM; Wharton OID; Wharton Empirical Workshop; Information & Learning Workshop, IESE; ISOM Workshop, Emory; Healthcare SIG; CUHK Shenzhen Healthcare & Service Operations Workshop

2018: IMA Data-Driven Supply Chain Mgmt (Applied) Workshop; IMA Data-Driven Supply Chain Mgmt (Theory) Workshop; Penn Warren Center for Network & Data Sciences; IBM Research Math for AI; IDinsight; MIT ORC IAP Seminar on OR for Social Impact

2017: UCLA Anderson; Duke Fuqua; USC Marshall; Northwestern IEMS; Yale School of Management; Harvard Business School; Columbia IEOR / DRO; Ross School of Business; INSEAD; Chicago Booth OM; Kellogg OM; Purdue Krannert IS; MIT IDSS Data Science Lab; U of Cambridge, Judge Business School; IBM Research Applied Probability Seminar; Cornell Tech; Stanford-Berkeley Health Economics Workshop

2016: Cornell ORIE; Wharton OID; Indiana Kelley; London Business School; Pittsburgh Katz; MIT Sloan OM; Stanford GSB OIT; Stanford Biostatistics Workshop; Stanford Medical School Med-X Conference; Healthcare SIG

2015 & earlier: Cornell ORIE; Cornell ORIE Young Scholars Workshop; Wharton Empirical Research in OM Workshop

Awards	Wharton Teaching Excellence Award, 2020

Finalist, Public Sector in Operations Best Paper Award, 2020
People's Choice Award, Early-Career Sustainable OM Workshop, 2020
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
Wharton Teaching Excellence Award, 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
Finalist, Intel Science Talent Search, 2008

Service	Co-Chair, George Nicholson Student Paper Competition, 2020

Co-Chair, Pierskalla Award for Best Paper in Healthcare, 2020
Program Committee, EC Conference, 2020
Program Committee, AAAI Conference on Artificial Intelligence, 2020
Program Committee, EC Mechanism Design for Social Good Workshop, 2018-2020
Wharton Dean's Advisory Council, 2019-2020
Area Chair, Mechanism Design for Social Good Workshop, 2019
Meritorious Service Award for *Management Science*, 2018
Co-Chair, Pierskalla Award for Best Paper in Healthcare, 2017
Speaker, CMU YinzOR Student Conference, 2017

Judge for Healthcare SIG in MSOM (2018-2020), Sustainability SIG in MSOM (2020), POMS Best Healthcare OM Paper Competition (2020), George Nicholson Student Paper Competition (2019), Revenue Management & Pricing Conference (2019), Healthcare Applications Society Student Paper Competition (2019), MSOM Student Paper Competition (2019), Elwood S. Buffa Doctoral Dissertation Award (2019), Service Science Best Cluster Paper Award (2017)

Reviewer for *Management Science*, *Operations Research*, *M&SOM*, *Journal of the Royal Statistical Society: Series B*, *Annals of Statistics*, and *Nature*