

Divya Singhvi

CONTACT INFORMATION	NYU Stern School of Business 44 West Fourth Street, 8-75, New York, NY - 10012	divya.singhvi@stern.nyu.edu divyasinghvi.github.io
ACADEMIC EMPLOYMENT	New York University, Stern School of Business Assistant Professor, Technology, Operations & Statistics	2021-present
	IBM Research, New York Postdoctoral Researcher, IBM Research AI Residency Program	2020-2021
EDUCATION	Massachusetts Institute of Technology PhD in Operations Research GPA: 5.00/5.00	2015-2020
	Cornell University S.B. (Hons.) <i>magna cum laude</i> in Operations Research & Engineering Minor in Applied Mathematics GPA: 3.94/4.00	2011-2015
HONORS AND AWARDS	<input type="checkbox"/> First place, POMS Sustainable Operations Student Paper Competition* (2023) <input type="checkbox"/> Finalist, POMS Service Operations Student Paper Competition* (2023) <input type="checkbox"/> Finalist, INFORMS Public Sector Operations Research Best Paper Award (2021) <input type="checkbox"/> Winner, ICSS Best Conference Paper Competition (2021) <input type="checkbox"/> Honorable Mention, M&SOM Practice Based Competition (2021) <input type="checkbox"/> MIT Best Analytics Capstone Award (Student Mentor) (2019) <input type="checkbox"/> Second place, INFORMS Best Service Science Paper Award Competition (2019) <input type="checkbox"/> Honorable mention, POMS Supply Chain Management Student Paper Award (2019) <input type="checkbox"/> First place, POMS Applied Research Challenge (2018) <input type="checkbox"/> First place, POMS Supply Chain Management Student Paper Award (2018) <input type="checkbox"/> Honorable mention, MIT ORC Best Student Paper Competition (2018) <input type="checkbox"/> Finalist, INFORMS Service Science Section Best Student Paper Award (2018) <input type="checkbox"/> TATA Scholarship for Students from India (2011-2015) <input type="checkbox"/> Omega Rho International Honor Society <input type="checkbox"/> Tau Beta Pi Engineering Honor Society <input type="checkbox"/> Dean's List (2011-2015)	
GRANTS	<input type="checkbox"/> NYU Stern Center for Sustainable Business Research Grant (2023)	
PUBLISHED & ACCEPTED PAPERS	Dynamic Pricing with Unknown Non-Parametric Demand and Limited Price Changes (with G. Perakis) Accepted in <i>Operations Research</i> – Spotlighted presentation in INFORMS RM&P Conference (2019) Ancillary Services in Targeted Advertising: from Prediction to Prescription (with A. Borenstein, J. W. Lua, A. Mangal, G. Perakis, S. Poninghaus, O. Skali Lami) Accepted in <i>Manufacturing & Service Operations Management</i> – Honorable Mention, M&SOM Practice Based Competition (2021) COVID-19: Prediction, Prevalence, and the Operations of Vaccine Allocation	

(with M. A. Bennouna, J. Joseph, D. A. Nze Ndong, G. Perakis, O. Skali Lami, I. Spantidakis, L. Thayaparan, A. Tsiourvas)

Manufacturing & Service Operations Management (Articles in Advance)

– Winner, ICSS Best Conference Paper Competition (2021)

– Finalist, Doing Good with Good OR Competition (Skali Lami, 2021)

– Finalist, INFORMS Public Sector in Operations Best Paper Award (2021)

Learning Personalized Product Recommendations with Customer Disengagement

(with H. Bastani, P. Harsha and G. Perakis)

Manufacturing & Service Operations Management (2022)

– Second place, INFORMS Best Service Science Paper Award Competition (2019)

– Honorable Mention, POMS College of Supply Chain Management Best Student Paper Award (2019)

The Role of Optimization in Some Recent Advances in Data-Driven Decision-Making

(with L. Baardman, R. Cristian, G. Perakis, O. Skali-Lami and L. Thayaparan)

Mathematical Programming (2022)

COVID-19: A Multiwave SIR Based Model for Learning Waves

(with G. Perakis, O. Skali Lami, L. Thayaparan)

Production and Operations Management (Articles in Advance)

– Finalist, INFORMS Service Science Best Student Paper Award, (Thayaparan, 2021)

– Preliminary version in MSOM Healthcare Operations SIG (2021)

Evaluation of individual and ensemble probabilistic forecasts of COVID-19 mortality in the US

(with E. Y. Cramer et. al.)

Proceedings of the National Academy of Sciences (2022)

The United States COVID-19 Forecast Hub Dataset

(with E. Y. Cramer et. al.)

Scientific Data (2022)

Predicting Bike Usage for New York City's Bike Sharing System

(with S. Singhvi, P. Frazier, S. Henderson, E. Mahony, D. Shmoys, D. Woodard)

AAAI Workshop on Computational Sustainability, 2015.

WORKING PAPERS

A Data Driven Approach to Improve Weaver's Productivity in Rural India

(with S. Singhvi and X. Zhang)

– Presented in the Early Career Sustainable OM Workshop (2023)

– Preliminary version accepted in MSOM Sustainable Operations SIG (2023)

– Finalist, POMS Service Operations Student Paper Competition (Zhang, 2023)

– First place, POMS Sustainable Operations Student Paper Competition (Zhang, 2023)

Designing Resale Platforms: An Application in India

(with I. Morgenstern, D. Saban and S. Singhvi)

– Preliminary version in 7th Marketplace Innovation Workshop (2022)

Online Learning with Sample Selection Bias

(with S. Singhvi)

(A previous version of this paper was circulated as "Increasing Charity Donations: A Bandit Learning Approach")

– Spotlighted presentation in INFORMS RM&P Conference (2022)

Math Programming based Reinforcement Learning for Multi-Echelon Inventory Management

(with P. Harsha, A. Jagmohan, J. Kalagnanam, B. Quanz)

Major Revision in *Manufacturing & Service Operations Management*

– Preliminary version in NeurIPS, Deep RL Workshop (2021)

Buying Cheap: Brand Switching During Economic Distress and Its Disparate Impact on Consumers

(with S. Dutta and S. Singhvi)

Major Revision in *Manufacturing & Service Operations Management*

First Delivery Gaps: A Supply Chain Lever To Reduce Product Returns In Online Retail

(with M. Chaurasia, S. Pandey, H. S. Rathore, G. Perakis)

Major Revision in *Manufacturing & Service Operations Management*

– Preliminary version in MSOM Supply Chain SIG (2019)

Leveraging Comparables for New Product Sales Forecasting

(with L. Baardman, I. Levin and G. Perakis)

– First place, POMS Applied Research Challenge (2018)

– First place, POMS Supply Chain Management Best Student Paper Award (2018)

– Finalist, INFORMS Service Science Section Best Student Paper Award (2018)

– Honorable mention in MIT ORC Best Student Paper Competition (2018)

Extended Sampled Trees for Classification and Regression

(with G. Perakis, O. Skali Lami)

– First place, MIT ORC Best Student Paper Competition (Skali Lami, 2021)

– Spotlighted presentation in INFORMS RM&P Conference (2021)

Leveraging the Newsvendor for Inventory Distribution at a Large Fashion E-Retailer With Depth and Capacity Constraints

(with G. Perakis, I. Spanditakis)

PATENTS

❑ Harsha, Pavithra, Ashish Jagmohan, Brian Leo Quanz, and Divya Singhvi. “Combining math-programming and reinforcement learning for problems with known transition dynamics.” U.S. Patent Application 17/751,625, filed February 9, 2023.

STUDENTS

❑ Xinyu Zhang (NYU Stern Operations PhD)

❑ Alex Akira Okuno (NYU Stern Operations PhD)

❑ Tiantong Li (NYU UG, Grad. in 2022)

– Initial Placement: Data Science Masters Program, Harvard University

❑ Junzey Ye (Princeton UG, Grad. in 2023)

– Initial Placement: Stanford Graduate School of Business PhD Program in OIT

INVITED TALKS

❑ Duke, Fuqua School of Business (02/2023)

❑ Indian Institute of Management, Udaipur (01/2023)

❑ HKUST, ISOM (11/2022)

❑ Meta, Economics Algorithm and Optimization Group (05/2022)

❑ INSEAD (10/2020)

❑ Cornell Tech, Operations Research & Information Engineering (01/2020)

❑ Cornell University, Operations Research & Information Engineering (01/2020)

