JOLINE UICHANCO

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PROFESSIONAL HISTORY

New York University, Tandon School of Engineering, New York, NY
- Associate Professor (with tenure), Technology Management and Innovation — Sept. 2025 to present

New York University, Tandon School of Engineering, New York, NY
- Visiting Associate Professor — Feb. 2025 to Sept. 2025

University of Michigan, Ross School of Business, Ann Arbor, MI
- Ford Motors Company Co-Director of the Tauber Institute for Global Operations — Sept. 2024 to June 2025
- Associate Professor (with tenure), Technology and Operations — Sept. 2022 to June 2025

Previous rank:
- Assistant Professor of Technology and Operations — Sept. 2014 to Aug. 2022

Amazon (on leave from U of Michigan)
- Senior Research Scientist, Modeling and Optimization — 2022 to 2023

IBM T.J. Watson Research Center, Yorktown Heights, NY
- Postdoctoral Researcher, Supply Chain Analytics — 2013 to 2014

EDUCATION

Ph.D. in Operations Research — 2013
Massachusetts Institute of Technology (MIT), Sloan School of Management
Dissertation: Data-driven optimization and analytics for operations management applications
Advisors: Prof. Retsef Levi and Prof. Georgia Perakis

M.S. in Computation for Design and Optimization — 2007
Massachusetts Institute of Technology (MIT), School of Engineering
Dissertation: Data-driven revenue management
Advisors: Prof. Retsef Levi and Prof. Georgia Perakis

M.S. in Computational Engineering — 2007
National University of Singapore (NUS)
Dissertation: Ambiguous risk measures and piecewise linear utility models in portfolio management
Advisors: Prof. Karthik Natarajan and Prof. Melvyn Sim

B.Sc. (Honors) in Computational Finance — 2006
National University of Singapore (NUS)
Lijen Industrial Development Medal for the best 2006 Honors-year project in Computational Finance

HONORS AND AWARDS

Institutional

- 2019. **Arnold M and Linda T Jacob Faculty Development Award**, Ross School of Business, University of Michigan (Ross school-wide, junior faculty research award)

Grants*

- *NSF*, *CMMI*, 1561791, "Joint optimization of pricing, assortment, and fulfillment in omnichannel retail", 6/1/2016–05/31/2020, Total: $246,263, Stef Jasin (PI), Joline Uichanco (co-PI)

*__Note:__ Ph.D. students in business schools are financially supported by the school for the entire duration of their PhD studies. Tenured and tenure track faculty in business schools are neither expected nor required to apply for external grants.

Professional

- 2024. Finalist in the **INFORMS Service Science Cluster Best Paper Award** for the paper "Workforce Configuration in Charity Settings: A Forward-Looking Approach"
- 2017. **INFORMS Revenue Management Practice Prize**, a prestigious award given once every 2 years to outstanding aplications of revenue management techniques, for the project "Omni-Channel Markdown Optimization" with IBM Research (Markus Ettl, Pavithra Harsha, and Shiva Subramanian) and a Top 15 U.S. retailer
- 2017. Honorable Mention in the first-ever **Biennial M&SOM Practice-Based Research Competition** for the paper "Dynamic pricing for omnichannel inventories" (appearing in the journal *M&SOM*) coauthored with Pavithra Harsha (IBM Research) and Shiva Subramanian (IBM Research)
- 2012. First Prize in the **IBM Service Science Best Student Paper Award** for the paper "Stochastic Optimization for Resource Allocation with Random Emergencies"

Student Awards

- 2022. Jiaxin (Alys) Liang: Winner of **EURO Working Group for Pricing and Revenue Management Student Video Award** for the presentation of the paper "Asymptotically Optimal Dynamic Pricing in the Presence of Stochastic Returns"
- 2022. Jiaxin (Alys) Liang: Second Place in the **POMS-HK Best Student Paper Competition** for the paper "Managing Retail Inventory and Pricing in the Presence of Stochastic Purchase Returns"
- 2020. Mengzhenyu Zhang: Awarded the **Rackham Predoctoral Fellowship**, one of the most prestigious awards granted by the University of Michigan for outstanding doctoral candidates working on dissertations that are unusually creative, ambitious and impactful
- 2019. Aravind Govindarajan: Second Place in the **POMS College of Supply Chain Management Best Student Paper Competition** for the paper "The distribution-free inventory problem for e-commerce fulfillment networks"
- 2019. Aravind Govindarajan: Finalist in the **POMS-HK Best Student Paper Competition** for the paper "The distribution-free inventory problem for e-commerce fulfillment networks"
- 2018. Mengzhenyu Zhang: Awarded the **W. Allen Spivey/Valerie and William Hall Family Fellowship** by the Ross School of Business, an award given to a 4^{th} or 5^{th} year Ph.D. student to recognize academic excellence, contributions to the research environment, and service to the program

PROFESSIONAL HIGHLIGHTS

Faculty Director, Tauber Institute for Global Operations, University of Michigan 2024 to present
As the first female Co-Director in the 30-year history of the prestigious Tauber Institute for Global Operations at the University of Michigan, I am honored to have led an Institution renowned for its excellence in global operations. The Tauber Institute is a unique partnership between industry and the University, specifically through a collaboration between Ross School of Business and the College of Engineering. In my role, I have been pivotal in crafting a visionary new direction for the Institute, positioning us to address the fast-paced changes in operations and supply chains driven by emerging technologies (AI, robotics, 3D printing), innovative business models (platforms and marketplaces), and pressing market demands (sustainability, resilience, privacy). Under my directorship, the Institute has pioneered efforts to build relationships that foster a collaborative ecosystem among students, faculty, and industry, thereby nurturing thought leadership for the future of supply chains.

Senior Research Scientist, Amazon, Washington 2022 to 2023
In my role as a Senior Research Scientist, I contributed to long-term strategic initiatives aimed at enhancing Amazon's network models by incorporating robustness and stochasticity. These improvements are integral to guiding Amazon's strategic planning and ensuring the resilience and adaptability of their operations.

PhD Program Faculty Coordinator, Technology & Operations area, Ross School of Business 2018 to 2022
As the PhD Program Coordinator, I spearheaded the development of a robust PhD admissions process in close collaboration with our department. I also enhanced our PhD recruiting events, fostering a stronger sense of community among admitted students, TO faculty, and current PhD candidates. Recognizing the need for clear guidance, I initiated the TO PhD Orientation Day, ensuring new students have a thorough understanding of program expectations.

A significant highlight of my tenure was collaborating with the Ross PhD office to improve the diversity of our program. In 2020, my efforts led to the admission of the first TO pre-doctoral fellow into the Ross Bridges to Doctorate Fellows Program (Bridges Program). Additionally, I actively recruited promising Master's students by visiting universities in countries underrepresented in our applicant pool.

These initiatives have yielded tangible results: we have increased our PhD admissions yield, reduced attrition rates, and significantly enhanced the diversity of our PhD cohort.

Postdoctoral Researcher, IBM T.J. Watson Research Center, New York 2013 to 2014
During my postdoctoral research, I engaged in multiple consulting projects with major retail organizations such as Best Buy, Office Depot, Target, and Kohl's. My work focused on developing data analytics and prescriptive models to enhance the profitability of their omni-channel operations. Over the course of the year, my contributions led to three patent submissions and the development of a decision-support system for price optimization, which was successfully implemented and piloted by a top 10 retailer. Additionally, my research was recognized with several prestigious awards, including the Revenue Management Practice Prize and the M&SOM Practice-Based Research Competition.

GRADUATE STUDENTS

I have graduated three Ph.D. students with two academic placements. Currently, I am advising two Ph.D. students.

Graduated Ph.D. students

- Jiaxin (Alys) Liang, 2024, Product Return Management at Large Scale: Effective Joint Decision-Making Supported by Comprehensive Performance Metrics, Co-advised with Stef Jasin.
  Current position: Assistant Professor, McGill University
- Mengzhenyu Zhang, 2021, Revenue management in the new age: Analysis and learning with dependency and non-stationarity, Co-advised with Hyun-soo Ahn.
  Current position: Assistant Professor, University College London (UCL)
- Aravind Govindarajan, 2019, Essays on e-commerce and omnichannel retail operations, Sole advisor.
  Current position: Principal Scientist - Data Science, Global Supply Chain and Logistics at Target Corp.

Current Ph.D. students

- Hanqi Wen, Expected graduation: 2026, Co-chair with Izak Duenyas.
- Bogyeom Lee, Expected graduation: 2029, Co-chair with Hyun-soo Ahn.

Graduated Pre-doctoral Research Fellows

- Benjamin Lewis, Currently: Ph.D. student in Marketing at MIT Sloan School of Management

Dissertation committee membership

- Chao Wu, 2023, Three essays on non-profit supply chain management. Arizona State University
- Manqi Li, 2021, Data-driven Operations Management. University of Michigan, Ross School of Business
- Amando Bernal, 2020, Pricing in Network Revenue Management Systems with Reusable Resources. University of Michigan, Industrial & Operations Engineering
- Qi Luo, 2020, Incentive Contracts in Multi-agent Systems: Theory and Applications. University of Michigan, Industrial & Operations Engineering
- Ece Sanci, 2019, Strategies for Disaster Preparedness and Disruption Risk Mitigation. University of Michigan, Industrial & Operations Engineering
- Hao Yuan, 2019, Data Driven Optimization: Theory and Applications in Supply Chain Systems. University of Michigan, Industrial & Operations Engineering

PUBLICATIONS AND SCHOLARLY PRESENTATIONS

Legend: Underline denotes co-authors who (at the time of authorship) were Ph.D. students and post-docs
Dagger† denotes co-authors who (at the time of authorship) were industry collaborators

Author order convention: In the author list, student authors (indicated by an underline) are listed first, followed by non-student authors in **alphabetical** order.

Refereed Journals

[1] 2025. H.-S. Ahn, C. Ryan, **J. Uichanco**, M. Zhang, "Certainty-equivalent pricing with dependent demand and limited price-changing opportunities", To appear in *Mathematics of Operations Research*
- Selected through a full-paper peer-review process as a Spotlight presentation at the 2019 Revenue Management and Pricing Conference (In the Top 16 out of 86 full paper submissions)

[2] 2024. C. Wu, M. Eftekhar, **J. Uichanco**, "Workforce Configuration in Charity Settings: A Forward-Looking Approach", *Manufacturing & Service Operations Management*, Volume: 26, Issue: 6, Pages: 2102-2120
- Finalist in the 2024 INFORMS Service Science Cluster Best Paper Award

[3] 2024. S. Najafi, I. Duenyas, S. Jasin, **J. Uichanco**, "Multi-product dynamic pricing (and ranking) with limited

inventories under Cascade Click model", *Manufacturing & Service Operations Management*, Volume: 26, Issue: 2, Pages: 554-572

[4] 2022. M. Lin, T. Huh, H. Krishnan, **J. Uichanco**, "Data-driven newsvendor problem: Performance of the sample aproximation approach", *Operations Research*, Volume: 70, Issue: 4, Pages: iii-vii

[5] 2022. M. Zhang, H.-S. Ahn, **J. Uichanco**, "Data-driven pricing for new products", *Operations Research*, Volume: 70, Issue: 2, Pages: 847–866

[6] 2022. Y. Lei, S. Jasin, **J. Uichanco**, A. Vakhutinsky†, "Joint product framing (display, ranking, pricing) and order fulfillment under the MNL model for e-commerce retailers", *Manufacturing & Service Operations Management*, Volume: 24, Issue: 3, Pages: 1261-1885

[7] 2021. **J. Uichanco**, "A model for pre-positioning emergency relief items before a typhoon with uncertain trajectory", *Manufacturing & Service Operations Management*, Volume: 24, Issue: 2, Pages: 766–790

[8] 2021. A. Govindarajan, A. Sinha†, **J. Uichanco**, "Distribution-free inventory risk pooling in a multi-location newsvendor", *Management Science*, Volume: 67, Issue: 4, Pages 2272-2291
- Second Place in the 2019 POMS College of Supply Chain Management Best Student Paper Competition
- Finalist in the 2019 POMS-HK Best Student Paper Competition

[9] 2021. A. Govindarajan, A. Sinha, **J. Uichanco**, "Joint inventory and fulfillment decisions for omnichannel retail networks", *Naval Research Logistics*, Special issue on Analytics and Operations of Online Retailing, Volume: 68, Issue: 6, Pages: 779–794

[10] 2019. P. Harsha†, S. Subramanian†, **J. Uichanco**, "Dynamic pricing of omnichannel inventories", *Manufacturing & Service Operations Management* (Special Section: First M&SOM Practice-Based Research Competition), Volume: 21, Issue: 1, Pages: 47–65
- Winner of the 2017 INFORMS Revenue Management Practice Prize
- Honorable mention in the 2017 Biennial M&SOM Practice-Based Research Competition

[11] 2018. K. Natarajan, M. Sim, **J. Uichanco**, "Asymmetry and Ambiguity in Newsvendor Models", *Management Science*, Volume: 64, Issue: 7, Pages: 3146–3167

[12] 2015. R. Levi, G. Perakis, **J. Uichanco**, "The data-driven newsvendor problem: New bounds and insights", *Operations Research*, Volume: 63, Issue: 6, Pages: 1294–1306

[13] 2014. M. Angalakudati†, S. Balwani†, J. Calzada†, B. Chatterjee†, G. Perakis, N. Raad†, **J. Uichanco**, "Business analytics for flexible resource allocation under random emergencies", *Management Science*, Volume: 60, Issue: 6, Pages: 1552–1573
- Winner of the 2012 IBM Service Science Best Student Paper Award

[14] 2010. K. Natarajan, M. Sim, **J. Uichanco**, "Tractable robust expected utility and risk models for portfolio optimization", *Mathematical Finance*, Volume: 20, Issue: 4, Pages: 695–731

Under Review in Refereed Journals

[15] H. Wen, I. Duenyas, **J. Uichanco**, "Pooling Goods of Different Quality: Platform Design under Inventory Commingling", *Management Science*, Under review (Round 1), Available in SSRN

[16] H.-S. Ahn, C. Ryan, **J. Uichanco**, M. Zhang, "Valuing influence with social learning", *Manufacturing & Service Operations Management*, Under review (Round 1), Available in SSRN

[17] J. Liang, S. Jasin, **J. Uichanco**, "Assortment and Inventory Planning Under Dynamic Substitution with MNL Model: An LP Approach and an Asymptotically Optimal Policy", *Operations Research*, Invited for Minor Revision (Round 3), Available in SSRN

[18] S. Najafi, S. Jasin, **J. Uichanco**, J. Zhao, "Assortment and Price Optimization Under a Multi-Attribute (Contextual) Choice Model", *Operations Research*, Under review (Round 3), Available in SSRN

[19] J. Liang, S. Jasin, **J. Uichanco**, "Combining a Smart Pricing Policy with a Simple Replenishment Policy: Managing Uncertainties in the Presence of Stochastic Purchase Returns", *Mathematics of Operations Research*, Under review (Round 2)
- Selected for the 2023 MSOM Supply Chain Management SIG
- Winner of 2022 EURO Working Group for Pricing and Revenue Management Student Video Award
- Second Place in the 2022 POMS-HK Best Student Paper Competition

[20] H. Wen, I. Duenyas, **J. Uichanco**, "The Interplay Between Information Solicitation and Product Innovation: A Dynamic Solution", *Manufacturing & Service Operations Management*, Reject and resubmit

Working Papers

[20] **J. Uichanco**, A. Sinha†, "Data-driven uncertainty sets from high-dimensional data for Amazon's transportation network", In preparation (Draft available upon request)

[21] F. Zhou, H. Jiang, A. Li†, **J. Uichanco**, "Designing Surprise Bags for Surplus Foods", Available in SSRN

[22] Z. Chen, **J. Uichanco**, J. Zhang, "Distributionallly robust multi-purchase choice model", In preparation

[23] B. Lee, H.-S. Ahn, **J. Uichanco**, "Service Design Using Personal Information", In preparation

Chapters in books

- 2019. S. Jasin, A. Sinha, **J. Uichanco**, "Omni-channel operations: Challenges, opportunities, and models", in S. Gallino and T. Moreno-Garcia (ed.) *Operations in an Omnichannel World*, Springer Series in Supply Chain Management: pp. 15–34

SERVICE

Service to the Profession

- Associate Editor for *Operations Research* (flagship journal in Operations Research)	2024 to present
- Associate Editor for *M&SOM* (flagship journal in Operations Management)	2024 to present
- Senior Editor for *POM* journal (flagship journal in Operations Management)	2022 to 2025
- Associate Editor for 4OR journal (jointly published by the Belgian, French, and Italian Operations Research Societies)	2014 to 2025

Other professional service roles

- 2025. Chair of the 2025 RMP Practice Prize
- 2025. Committee member of the 2025 RMP Section Award

- 2025. Contributed Cluster Committee member for the 2025 INFORMS Annual Meeting
- 2024. Faculty advisor to the University of Michigan team for the ISM Case Competition (Fourth place finish)
- 2023. Selection Committee member for the 2023 POMS College of SCM Best Student Paper Competition
- 2022. Discussant at the Revenue Management and Pricing (RMP) Conference (Virtual)
- 2022. Selection Committee member for the 2022 Best Working Paper Competition for the Technology, Innovation Management, and Entrepreneurship Section (TIMES) of INFORMS
- 2022. Selection Committee member for the POMS Supply Chain Management Student Paper Competition
- 2021. Cluster Chair of the POM in Practice Cluster, POMS 2021 Conference (Virtual)
- 2021. Selection Committee member for the MSOM Best Student Paper Award
- 2020. Selection Committee member for the INFORMS Public Sector Operations Research Best Paper Award
- 2020. Student Paper Prize Committee for the INFORMS Revenue Management and Pricing (RMP) Section
- 2020. Cluster Chair of the POM in Practice Cluster, POMS 2020 Conference in Minneapolis, Minnesota
- 2019. Selection Committee member for the INFORMS Public Sector Operations Research Best Paper Award
- 2019. Cluster Chair or the Revenue Management and Pricing, INFORMS International Conference, Cancun, Mexico
- 2019. Program Committee member, INFORMS Revenue Management & Pricing Section, Stanford, California
- 2019. Selection Committee member for the POM College of Supply Chain Management Best Student Paper Award
- 2018. Selection Committee member for the Buffa Doctoral Dissertation Award by the Decision Sciences Institute
- Served as reviewer for Operations Research (OR), Management Science (MS), Manufacturing & Service Operations Management (M&SOM), Production and Operations Management (POM), Mathematical Programming (MP), Mathematics of Operations Research (MOR), European Journal of Operations Research (EJOR), Wiley Encyclopedia of Operations Research and Management Science, SIAM Workshop on Analytic Algorithms and Combinatorics (ANALCO '10)

Service to Institution

Faculty Co-Director 2024 to present
Tauber Institute for Global Operations
University of Michigan

Ph.D. Program Faculty Coordinator 2018 to 2022
Technology & Operations area, Ross School of Business, University of Michigan

Core Course Coordinator (TO 313 Operations Management) 2017 to 2022, 2023 to 2024
Ross School of Business, University of Michigan

Ross Integrative Semester (RIS) Committee Member 2017 to 2022, 2023 to 2024
Ross School of Business, University of Michigan

Community Values Committee Member 2021, 2023, 2024
Ross School of Business, University of Michigan

TEACHING

New courses introduced at University of Michigan

- Revenue Management (TO 649), MBA level (2.25 Credits, Elective), Fall B 2023, Winter A 2025
- Survey of Topics in Technology & Operations (TO 899), Ph.D. level (3 Credits), Winter 2020, Winter 2022
- Humanitarian Operations (TO 899), Ph.D. level (3 Credits), Winter 2015

Courses taught at University of Michigan

- Manufacturing and Supply Operations (TO/MFG 605), graduate level (3 Credits, Core) – Core course for Masters of Supply Chain Management students, as well as students in the Tauber Institute
- Topics in Global Operations (MFG 501/TO 701), graduate level (1.5 Credits, Core), Fall 2024 – Core course for students in the Tauber Institute
- Introduction to Operations Management (TO 313), undergraduate level (3 Credits, Core), Fall 2015, Fall 2016, Fall 2017, Fall 2018, Fall 2019, Fall 2020, Fall 2021, Fall 2023 – Core course for Bachelors in Business Administration students; part of the Ross Integrative Semester
- Introduction to Operations Management (TO 598), graduate level (2.25 Credits, Core), Summer 2023, Summer 2024 – Core course for Global MBA students

NOTABLE SEMINARS

Invited Seminar/Workshop Talks (Since joining U of M)

- 2024. Demand shaping strategies to overcome the profitability gap of e-commerce fulfillment networks, March 5, Columbia IEOR-DRO Seminar series, Columbia University, New York, NY
- 2023. Overcoming the profitability problem of e-commerce retail using data-driven product framing, April 28, The 7th Women in Data Science (WiDS) Conference at the American University of Beirut (AUB), Beirut, Lebanon
- 2023. On using data for disaster preparedness in the Pacific typhoon belt: A case study of the Philippines, April 27, The 7th Women in Data Science (WiDS) Conference at the American University of Beirut (AUB), Beirut, Lebanon
- 2023. Overcoming the profitability problem of e-commerce retail using data-driven product framing, April 25, Industrial Engineering Seminar, Bilkent University, Ankara, Turkey
- 2023. Overcoming the profitability problem of e-commerce retail using data-driven product framing, April 20, City University of New York (CUNY), Zicklin School of Business, Operations Management Seminar Series (OMEGA)
- 2022. Distribution-free inventory optimization for a retail fulfillment network, November 7, New York University Stern School of Business (NYU Stern), Operations Management Lunch Seminar (MOILS)
- 2022. Dynamic pricing under a Cascade Click model, Summer workshop on new trends and challenges in e-commerce, supply chain management, and logistics, August 26, University of Chicago Booth School of Business
- 2022. Product Framing for E-commerce Retailers, February, Amazon Tech Talk
- 2021. A model for prepositioning emergency relief items before a typhoon with uncertain trajectory, November 15, University of California Los Angeles (UCLA), Decisions, Operations & Technology Management
- 2021. Hosmer-Hall Interdisciplinary Research (Scholar's Journey) presentation, March 17, University of Michigan, Ross School of Business
- 2020. Product Framing for E-commerce Retailers, July 17, Institute for Data, Systems, and Society (IDSS) seminar series (Virtual seminar), Massachusetts Institute of Technology
- 2020. Decision-making under uncertainty using distributionally robust optimization, January 13, Operations Research and Financial Engineering (ORFE) seminar series, Princeton University

- 2018. Dynamic pricing of omnichannel inventories, October, Operations Management seminar series, Georgia Institute of Technology Scheller School of Business
- 2018. E-commerce revenue management through personalized website displays, pricing and fulfillment, June, Retail Analytics workshop, University of North Carolina Kenan-Flagler Business School
- 2018. Dynamic pricing of omnichannel inventories, February, Operations Management seminar series, Yale School of Management
- 2018. Dynamic pricing of omnichannel inventories, February, Operations Management seminar series, Massachusetts Institute of Technology, Sloan School of Business
- 2017. Dynamic pricing of omnichannel inventories, May, Institute for Data, Systems, and Society (IDSS) seminar series, Massachusetts Institute of Technology
- 2017. Asymmetry and ambiguity in newsvendor models, May, Operations Research and Financial Engineering (ORFE) seminar series, Princeton University
- 2017. Dynamic pricing of omnichannel inventories, May, Operations Management seminar series, Carnegie Mellon University, Tepper Business School
- 2014. Analytics for humanitarian logistics, December, IBM Philippines and University of Asia and the Pacific, Philippines
- 2014. Analytics for humanitarian logistics, December, Ateneo Institute of Sustainability, Ateneo de Manila University, Philippines