

JIM (JUNMIN) SHI

Tuchman School of Management, New Jersey Institute of Technology
University Heights, Newark, NJ 07102
Tel: 973-642-7027, Mobile: (678) 661-9686
Email: jshi@rutgers.edu, Website: <http://web.njit.edu/~jshi/>

ACADEMIC POSITIONS

- Rutgers Business School, Rutgers University, Newark, NJ
Affiliate Faculty 1/2025-Present
Visiting Professor (during Sabbatical Leave) 1/2021-6/2021
Instructor 2008-2010, 2018
- Tuchman School of Management, New Jersey Institute of Technology, Newark, NJ
Henry J. Leir Chair Professor 7/2022-Present
Master Teacher 7/2022-Present
Hurlburt Chair Professor 7/2019-6/2022
Full Professor 7/2023-Present
Associate Professor (with tenure) 6/2017-Present
Assistant Professor 9/2014-5/2017
- Robinson College of Business, Georgia State University, Atlanta, GA
Assistant Professor 8/2010-8/2014
- Rotman School of Management, University of Toronto, Toronto, Canada
Visiting Professor 12/2013-3/2014
- Hong Kong University of Science and Technology, Hong Kong
Visiting Professor 2018, 2020, 2023-2025
Visiting Scholar 5/2012-6/2012

EDUCATION

Ph.D., MBA	Dept. of Supply Chain Management & Marketing Sciences Rutgers Business School, Rutgers University, NJ	8/2006-7/2010
ME	The Grove School of Engineering, City College of New York, CUNY, NY	2/2004-8/2006
MS	Applied Mathematics Department, Shanghai JiaoTong University, Shanghai, China	9/2001-2/2004

RESEARCH INTEREST

- Supply Chain Management (SCM)
- Technology for SCM (e.g., Blockchain, AI, Data Sciences)
- FinTech and Business Analytics
- Agricultural Supply Chain (Food Supply Chain, Agribusiness and AgriTech)
- Transportation and Logistics
- Healthcare Operations Management

EDITORIAL SERVICE

- Area Editor: **Omega**, The International Journal of Management Science, 2025-Present.
- Associate Editor: **Decision Sciences Journal** (DSJ), 2020-2023.
- Editorial Board: **Production and Operations Management**, (POMS), 2020-Present.
- Associate Editor: **Omega**, 2021-2024.
- Associate Editor: **Data Science and Management** (DSM), 2020-Present
- Guest Editor: **FinTech**, 2022-2024
- Guest Editor: **Mathematics**, 2022-2024

SELECTED HONORS

2025	Excellence in Research Award, Senior Faculty, MTSM, NJIT.
2024	President Award of Teaching Excellence by Lecturer, Rutgers University
2023	Best Paper Award, DSI 2023
2022	INFORMS Prize for Teaching OR/MS Practice (International)
2022	Poets & Quants' list of the 50 Best Undergraduate Professors (Nationally / Internationally)
2022	Leir Endowed Chair Professorship, Henry J. Leir Chair in Business, Technology & Society
2022	Excellence in Research Award , MTSM, NJIT
2022	Excellence in Teaching Award, MTSM, NJIT
2021	Master Teacher Designation (the highest teaching recognition at NJIT)
2021	Fellow of the Institute for Teaching Excellence (ITE) at NJIT
2020	Blockchain Practitioner Instructor (IBM Certified)
2019	IBM Faculty Research Award , Thomas J. Watson IBM Center, NY
2019	Robert W. Van Houten Award , Alumni Association of NJIT
2019	Hurlburt Endowed Chair Professor, NJIT
2018	NJIT Excellence in Research Medal Award 2018 (Nominee)
2017	Excellence in Teaching Award, NJIT (University Wide)
2017	Nominee for Outstanding Research Award, NJIT (University Wide)
2017	Excellence in Teaching Award (Teaching Lower Division), Tuchman School of Management
2017	Outstanding Research Award, Tuchman School of Management, NJIT
2016	Nominee for Excellence in Teaching Award, NJIT (University Wide)
2016	Excellence in Teaching Award (Teaching Lower Division), Tuchman School of Management
2010-2014	<i>Teaching Excellence Awards</i> , each semester, for teaching MBA, MGMT8150, Dept. of MGS
2009-2010	INFORMS Student Research Contest, NJ-Chapter, Finalist;
2009-2010	Graduate Student Excellence Award, Rutgers University, NJ
2009-2010	CSCMP Scholar award, CSCMP NJ-Round table, NJ.

SELECTED PUBLICATIONS

- [J1]. Xiao, T. and J. Shi, "Online or offline: Channel priority for a dual-channel supply chain under demand and yield uncertainties", **Naval Research Logistics** (NRL), 2025, forthcoming.
- [J2]. Tekani, D.V., J. Shi, and H. Grebel, "Managing renewable energy resources using equity-market risk tools - the efficient frontiers". **Energy Efficiency**, 18(57), 2025 (advising a master student).
- [J3]. Li, Z., A. Chang, J. Shi and J. Wang, "Coordination Schemes for Resource Reallocation and Patient Transfer in Hospital Alliance Models," **Decision Sciences Journal** (DSJ), 56(1), 71-92, 2025.
- [J4]. Dai, Z., X. Gong, J. Wang, L. Yu, and J. Shi, "Integrated robust scheduling for inpatient surgery and ambulatory surgery", **Computers & Operations Research**, Forthcoming, 2025.
- [J5]. Li, Z., A. Chang, J. Shi and J. Wang, "Referral Mechanisms Coordinating Hierarchic Healthcare System: Subsidy Scheme versus Penalty Scheme," **Annals of Operations Research** (ANOR), Forthcoming, 2025.
- [J6]. Liu, S., W. Huang, J. Shi, F. Xu, X. Tang, H. Lu, "DeepSeek: Implications for Data Science and Management in the AI Era", **Data Science Management** (DSM), 2025, forthcoming.
- [J7]. Wang, W., Z. Wang, H. Zhang, J. Chang, and J. Shi, "IoT-driven Dynamic Replenishment of Fresh Produce in the Presence of Seasonal Variations: A Deep Reinforcement Learning Approach". **Omega**, The International Journal of Management Science, 134, 103299, 2025.
- [J8]. Wang, J., Z. Dai, J. Shi, H. Liu, "Robust Surgical Scheduling for Non-Operating Room Anesthesia (NORA) under Surgical Duration Uncertainty", **Decision Sciences Journal** (DSJ), 55(3), 2024, 262-280.
- [J9]. Chang, A., F. Zhou, N. El-rayes, J. Shi, "Food Transportation and Price Impacted by Diesel Price and

- Truck-Driver Shortage Pre-, Amid and Post Pandemic”, **Transportation Research Part E (TRE)**, Vol. 192, 103794, 2024.
- [J10]. Zhou, F., A. Chang and J. Shi, “How the Economic Policy Uncertainty (EPU) Impacts FinTech: the Implication of P2P Lending Markets”, **Finance Research Letters (FRL)**, Volume 70, December 2024, 106268.
- [J11]. Yang J. and J. Shi, “Discrete-item Inventory Control involving Unknown Censored Demand and Convex Inventory Costs”, **Production and Operations Management (POMS)**, 32(1), 45-64, 2023.
- [J12]. Wang, J., Z. Dai, W. Zhang, J. Shi, Operating Room Scheduling for Non-Operating Room Anesthesia (NORA) with Uncertain Emergency Arrivals, **Annals of Operations Research (ANOR)**, 321(1-2), 565-588, 2023.
- [J13]. El-Rayes, N., A. Chang and J. Shi, “Plastic Management and Sustainability: A Data-Driven Study”, **Sustainability**, 15(9), 7181, 2023.
- [J14]. Wang, J., X. Zhang and J. Shi “Hospital Dual-channel Adoption Decisions with Telemedicine Referral and Misdiagnosis”, **Omega**, The International Journal of Management Science, 119, 102875, 2023.
- [J15]. Tian, X., J. Shi and X. Qi, “Sequential stochastic allocation for creative crowdsourcing”, **Production and Operations Management (POMS)**, 31(2), 697-714, 2022.
- [J16]. Shi, J. “Optimal Production/Inventory Systems Subject to Stock-Out Risk”, **Annals of Operations Research**, DOI: 10.1007/s10479-016-2339-5, 317(2), 777-804, 2022.
- [J17]. Wu, J., PW. Zhang, Y. Wang, J. Shi, “Integrated Aviation Model and Metaheuristic Algorithm for Hub-and-Spoke Network Design and Airline Fleet Planning”, **Transportation Research Part E: Logistics and Transportation Review**, 164, 102755, 2022.
- [J18]. Dai, Z., J. Wang and J. Shi, “How does the hospital make a safe and stable elective surgery plan during COVID-19 pandemic?” **Computers & Industrial Engineering (CAIE)**, 169, 108210, 2022.
- [J19]. Wang, J., Z. Dai and J. Shi, “Surgical scheduling by Fuzzy model considering inpatient beds shortage under uncertain surgery durations.” **Annals of Operations Research (ANOR)**, 2022.
- [J20]. Li, Z., J. Wang, S. Perera and J. Shi, " Coordination of a supply chain with Nash bargaining fairness concerns", **Transportation Research Part E: Logistics and Transportation Review**, 159, 102627, 2022.
- [J21]. Chang, A., N. El-Rayes and J. Shi, “Blockchain Technology for Supply Chain Management: A Comprehensive Literature Review”. **FinTech**, 1(2), 191-205, 2022.
- [J22]. Chang, A., M.N. Katehakis, J. Shi and Z. Yan “Blockchain-empowered Newsvendor optimization”, **International Journal of Production Economics (IJPE)**, 238, 108144, 2021,
- [J23]. Wang, J., Z. Li, A. Chang, and J. Shi, “Capacity Reallocation via Sinking High-Quality Resource in a Hierarchical Healthcare System”, **Annals of Operations Research** 300(1), 97-135, 2021.
- [J24]. Wang, J., Z. Li, J. Shi, A. Chang, “Hospital Referral and Capacity Strategies in Two-Tier Healthcare Systems”, **Omega**, The International Journal of Management Science, 100, 102229, 2021.
- [J25]. Gao, L. J. Shi, M. Gorman and T. Luo, “Business Analytics for Intermodal Capacity Management”, **Manufacturing & Service Operations Management (MSOM)**, 22(2), 310-329, 2020.
- [J26]. Lu, H., Chen, X., Shi, J., Vaidya, J., Atluri, V., Hong, Y., & Huang, W. “Algorithms and Applications to Weighted Rank-one Binary Matrix Factorization”. **ACM Transactions on Management Information Systems (TMIS)**, 11(2), 1-33, 2020.
- [J27]. Shi, J. Y., Zhao, K. Kiwanuka and A. Chang “Optimal Selling Policies for Farmer Cooperatives”, **Production and Operations Management (POMS)**, 28(12), 3060-3080, 2019.
- [J28]. Chang, A., H. Lu, J. Shi “Stock-Out Risk Control of the Production/Inventory System with Compound Poisson Demands”, **Omega**, The International Journal of Management Science, 83, 181-198, 2019.
- [J29]. Katehakis, M.N., B. Melamed and J. Shi, “Cash-Flow Based Dynamic Inventory Management”, **Production and Operations Management Society (POMS)**, 25(9), 1558-1575, 2016.
- [J30]. Xiao, T. and J. Shi, “Supply Priority and Contract in a Dual-Channel Supply Chain”, **European Journal of Operational Research (EJOR)**, 254: 813-823, 2016.

- [J31]. Chang A., and J. Shi, "Pricing American Option via the Transform-Expand-Sample Forecasting Methods", **Journal of Business and Economics**, Paper ID: JBE20160824-2, Volume 7, No. 11, pp. 1756-1763, 2016.
- [J32]. Katehakis, M.N., B. Melamed and J. Shi, "Optimal Time-Average Cost for Inventory Systems with Compound Poisson Demands and Lost-sales", **Annals of Operations Research**, DOI 10.1007/s10479-015-1998-y, 2015.
- [J33]. Qi, L., J. Shi and X. Xu "Supplier Competition under the Dual-sourcing Setting", **Omega** (the International Journal of Management Science), 55, 91-110, 2015.
- [J34]. Shi, J. M.N. Katehakis, B. Melamed, Y. Xia, "Optimal Continuous Replenishment for a Production-Inventory System with Compound Poisson Demands and Lost-sales", **Operations Research (OR)**, 6(5): 1048 - 1063, 2014.
- [J35]. Shi, J. X. Yue and Y. Zhao, "Operations Sequencing under Yield Loss", **Naval Research Logistics**, 61(2), 144-154, 2014.
- [J36]. Shi, J. and Y. Zhao "The Value of Component Commonality under Non-Holdback Allocation Rules", **Operations Research Letters**, 42 (6-7), 409 - 413, 2014.
- [J37]. Shi, J., M.N. Katehakis and B. Melamed, "Martingale Methods for Pricing Inventory Penalties under Continuous Replenishment and Compound Renewal Demands", **Annals of Operations Research**, 208 (1), 593-612, 2013.
- [J38]. Shi, J., Y. Sun, X. Zhang and J. Xiao "Random Access Channel with Retransmission Gain." **IEEE Transactions on Smart Processing and Computing**, vol. 1, no. 1, September 2013.
- [J39]. Shi, J. and Y. Zhao, "Some Structural Results on Acyclic Supply Chains", **Naval Research Logistics**, Vol. 57, No. 6, 605-613, 2010.
- [J40]. Shi J., and A. Chang, "Revenue and Duration of Oral Auction", **Journal of Service Science and Management**, Vol. 2, No. 4, 368-377, Dec. 2009.
- Sun, Y. and J. Shi, "Retransmission diversity in large CDMA random access systems," **IEEE Trans. on Signal Processing**, vol. 55, No. 7, July 2007.

BOOK CHAPTERS

- [J41]. Shi, J. and C.F. Lee, Chapter 82, "Application of alternative ODE in Finance and Economics research" in *Handbook of Quantitative Finance and Risk Management*, (Editor: C. F. Lee), Springer, 2009.
- [J42]. Yang, J., Y. Xia and J. Shi, "A Game of Competitive Investment: Over-capacity and Under-learning", (2015). *Supply Chain Management and Logistics: Innovative Strategies and Practical Solutions*. (Eds: Liang, Z., Chaovalitwongse, W. A., & Shi, L.) CRC Press.
- [J43]. Chang, A., N. El-Rayes and J. Shi, "Blockchain Technology Toward a Circular Economy: A Future Paradigm" in Springer Book "Circular economy and Sustainable Development: a necessary nexus for a sustainable future", Forthcoming, Springer, US, 2024. [Peer Reviewed Chapter].
- [J44]. Shi, J. and J. Chang, "Blockchain and Newsvendor", in "Encyclopedia in Operations Management", Editor Tsan-Ming (Jason) Choi, 2025 [Peer Reviewed Chapter].

INVITED TALKS

- Invited Lectures, Department of Industrial Engineering and Decision Analytics, Hong Kong University of Science and Technology (HKUST), July-August 2025.
- Department of Industrial Engineering and Engineering Management, National Tsing-Hua University (NTHU), Taiwan, July 29th, 2025.
- Institute of Information Management (IIM), National Yang Ming Chiao Tung University (NYCU), Taiwan, July 2025.
- Invited Lectures, International Summer Camp of Management Science for PhD students, Nanjing University, Nanjing, China, July 13-14th, 2024.
- Department of Industrial Engineering and Engineering Management, National Tsing-Hua University (NTHU), Taiwan, July 4th, 2024.

- Invited Speech, Institute of Information Management (IIM), National Yang Ming Chiao Tung University, Taiwan, July 3rd, 2024.
- Invited Discussant, 33rd Annual Conference on Financial Economics and Accounting (CFEA), Rutgers Business School, Nov. 3-4, 2023.
- Conference Panelist, Leir Research Institute (LRI) Conference 2022, Sept. 1st, 2022.
- Princeton University, Panel Discussant, the 5th Annual Princeton SmartDrivingCars, NJ, June 2-4, 2022.
- NEDSI Annual Conference, **Conference Panelist**, Newark, NJ, April 7-9, 2022.
- Logistics and Distribution Institute (LoDI), **Keynote Speech**, the conference of Reflections on Covid-19 Disruptions and Future Visions for Logistics Industry, Sept. 23rd-24th, 2021.
- Worcester Polytechnic Institute (WPI), Foisie Business School, April 9th, 2021.
- NanKai University, TianJin, China, Zoom Online, Mar. 29th, 2021.
- Prudential, Headquarter in Newark, NJ, May 2020
- Wake Forest University, School of Business, Winston-Salem, NC, Jan. 2019
- Hong Kong Polytechnic University, Dept. of Logistics and Maritime Studies, HK, Aug. 6th, 2018
- Hong Kong Baptist University, Dept. of Mathematics, HK, Aug. 3rd, 2018.
- Nanjing University, Nanjing, China, July 10, 2018.
- Nankai University, Tianjin, China, July 7, 2018.
- Stevens Institute of Technology, the School of Business, Feb. 2017.
- University of Toronto, Rotman School of Management, Toronto, Jan. 2014.
- University of Hong Kong, Management Department, Business School, HK. Jan. 2013.
- Case Western Reserve University, Dept. of Operations, Cleveland, OH. Dec. 2012.
- Chinese University of Hong Kong, Dept. of Operations Management, Business School, 2013.

FEDERAL GRANT

- [1] USDA, Primary Investigator (PI), Repositioning Empty Containers for Agricultural Container Logistics, 9/19/2016 – 11/18/2018.
- [2] United States Department of Agriculture (USDA), Impacts and Implications of Transportation Networks on Food Distribution and Accessibility: Rural vs. Urban, 8/15/2021 – 8/31/2023, collaborating with the University of Wisconsin-Madison.
- [3] United States Department of Agriculture (USDA), Impact of Rising Diesel Prices and Truck Driver Availability on Food Transportation and Distribution. 7/30/2022 – 6/30/2024.

TEACHING EXPERIENCE

- **Rutgers Business School:**
 - *Econometrics* (DBA Program, 2023-Present)
 - *Production and Operations Management*
 - *Business Research Methods*
 - *Introduction to Supply Chain Management*
- **Tuchman School of Management, NJIT:**
 - *Blockchain Technology for Business*
 - *Data-Driven Financial Modeling*
 - *Business Data Analytics* (Business Statistics)
 - *Business Research Methods*
- **Robinson College of Business, GSU:**
 - Regular MBA, PMBA, EMBA and Ph.D. students**
 - *Business Modeling in Operations Management*
 - *Management Science*

- *Spreadsheet Modeling*

Undergraduate

- *Business Modeling in Operations Management (RCB Honors Program)*
- *Business Analysis (MGS3100),*
- *Optimal Resource Allocation - Critical Thinking Through Writing*

PROFESSION AND PROFESSIONAL SOCIETIES

- CSCMP (*Council of Supply Chain Management Professionals*)
- INFORMS (*Institute for Operations Research & Management Sciences*)
- POMS (*Society of Production and Operations Management*)
- DSI (*Decision Science Institute*)
- ASCM (*Association for Supply Chain Management, aka. APICS*)
- AAAS (*American Association for the Advancement of Science*)