

Jafar Namdar

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SUMMARY

- I am an assistant professor of Supply Chain Management (SCM) at Eli-Broad College Of Business, Michigan State University (MSU). Generally, my research involves using business analytics techniques to solve business problems focusing on supply chain digitalization, disruption management, and the effects of policy uncertainty and political instability on supply chains.

ACADEMIC POSITIONS

July 2024 – present	Assistant Professor	ELI BROAD COLLEGE OF BUSINESS, MSU, EAST LANSING, MI
	- My expertise lies in applying cutting-edge analytics techniques, including econometrics, machine learning (ML), and simulation, to address real-world problems in the global supply chain. - I also teach SCM 470: Integrated Supply Chain Management Capstone (W), which emphasizes the analysis and problem-solving of supply chain management cases, with a particular focus on purchasing, operations, and logistics challenges.	
July 2022 – July 2024	Postdoctoral Associate	MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE, MA
	- Actively engaged with industry stakeholders and facilitated multiple workshops centered around supply chain subjects of interest. - Instructed and designed courses focused on machine learning, statistical analyses, and causal inferences, with a specific focus on the supply chain (SCM 250 & SCM 254). - Co-advised four capstone projects for graduate students throughout the academic year (SCM 800). - Served as a co-instructor for the Digital Supply Chain Transformation course (SCM 294).	

EDUCATION

Aug 2017 – May 2022	Ph.D. in Business Analytics	TIPPIE COLLEGE OF BUSINESS, UIOWA, IOWA CITY, IA
	- Dissertation: Essays on Vulnerability of Global Supply Chains - Chairs: Jennifer Blackhurst and Gautam Pant - Committee: Jennifer Blackhurst, Gautam Pant, Sachin Modi, Kang Zhao	
Aug 2015 – May 2017	M.Sc. in Industrial Engineering	UNIVERSITY OF TENNESSEE, KNOXVILLE, TN
	Thesis: Supply Chain Resilience for Single and Multiple Sourcing in the Presence of Disruption Risks	
Aug 2012 – March 2015	M.Sc. in Industrial Engineering	UNIVERSITY OF TEHRAN, TEHRAN, IRAN
	Thesis: Resilient Supply Chain Network Design: A Business Continuity Management (BCM) Approach	

RESEARCH INTERESTS

- Topic:** Supply Chain Analytics, Supply Chain Resilience, Policy Uncertainty & Political Instability, Green Innovation Spillover
- Methodology:** Applied Econometrics, Peer Effect Models, Causal Inference, Machine Learning, Simulation & Optimization

PUBLICATIONS

PUBLISHED PAPERS

- Namdar, J.**, Pant, G., & Blackhurst, J.V. "Vulnerability of Global Supply Chains: Impact of Industrial and Geopolitical Concentration of Upstream Industries on Firm Resilience During COVID-19." *Production and Operations Management* (**Forthcoming; Accepted on December 2024**), Available at <https://doi.org/10.1177/10591478251313787>
*Received a grant of \$160,000 from the U.S. Government for execution.
- Namdar, J.**, Blackhurst, J.V., Song, S., & Zhao, K. (2024). "Predicting Nexus Suppliers to Prevent Cascading Supply Chain Disruptions." *Journal of Supply Chain Management*. 60 (3), 18-38. DOI: <https://doi.org/10.1111/jscm.12326>
- Namdar, J.**, Modi, S., & Blackhurst, J.V. (2024) "Diversify or Concentrate? Supply Chain Responses to Policy Uncertainty." *Journal of Supply Chain Management*. DOI: <https://doi.org/10.1111/jscm.12336>
- Jackson, I., **Namdar, J.**, Saénz, M. J., Elmquist III, R. A., & Dávila Novoa, L. R. (2024). "Revolutionize cold chain: an AI/ML driven approach to overcome capacity shortages." *International Journal of Production Research..* DOI: <https://doi.org/10.1080/00207543.2024.2398583>

- Jackson, I., Ivanov, D., Dolgui, A., & **Namdar, J.** (2024). "Generative artificial intelligence in supply chain and operations management: a capability-based framework for analysis and implementation." *International Journal of Production Research*. DOI: <https://doi.org/10.1080/00207543.2024.2309309>
* **Appeared on IJPR's list of the most-cited papers in 2024.**
- Muñoz-Villamizar, A., Piatti, M., Mejia-Argueta, C., Pirabe, L. F., **Namdar, J.**, & Gomez, J. F. (2024). "Navigating retail inflation in Brazil: A machine learning and web scraping approach to the basic food basket." *Journal of Retailing and Consumer Services*. DOI: <https://doi.org/10.1016/j.jretconser.2024.103875>
- **Namdar, J.**, Blackhurst, J.V., & Azadegan, A. (2022). "On Synergistic Effects of Resilience Strategies: Developing a Layered Defense Approach." *International Journal of Production Research*. 60 (2), 661-685, DOI: <https://doi.org/10.1080/00207543.2021.2013561>
- **Namdar, J.**, Torabi, S. A., Sahebjamnia, N., & Nilkanth Pradhan, N. (2021). "Business Continuity-Inspired Resilient Supply Chain Network Design." *International Journal of Production Research*. 59 (5), 1331-1367, DOI: <https://doi.org/10.1080/00207543.2020.1798033>
- **Namdar, J.**, Li, X., Sawhney, R., & Pradhan, N. (2018). "Supply Chain Resilience for Single and Multiple Sourcing in the Presence of Disruption Risks." *International Journal of Production Research*. 56 (6), 2339-2360, DOI: <https://doi.org/10.1080/00207543.2017.1370149>
* **Appeared on IJPR's list of the most-cited papers in 2018.**
- Torabi, S.A., **Namdar, J.**, Hatefi, S.M., & Jolai, F. (2016). "An Enhanced Possibilistic Programming Approach for Reliable Closed-Loop Supply Chain Network Design." *International Journal of Production Research*. 54 (5), 1358-1387, DOI: <https://doi.org/10.1080/00207543.2015.1070215>
- **Namdar, J.**, Sahebjamnia, N., Tavakkoli-Moghaddam, R. & Rezaei Soufi, H. (2016). "Designing a reliable distribution network with facility fortification and transshipment under partial and complete disruptions." *International Journal of Engineering*. 29(9), 1273-1281.

UNDER REVIEW & WORKING PAPERS

- **Namdar, J.**, Modi, S., Azadegan, A. & Baghersad, M. "Benefits of Extreme Political Stability and Instability of Suppliers Countries for Firms: The U-Shaped Relationship" (**Major Revision-Invited for the 3rd round of review**) Available at <https://ssrn.com/abstract=4533808>

WORK IN PROCESS

- **Namdar, J.**, Liu, Y., Modi, S. & N. Safaei. "Building Supply Chain Capabilities through Analytics Human Resources: Evidence from Job Postings Data." (**Writing Stage**)
- Safaei, N. **Namdar, J.**, Pant, S., & Pant, G. "The Green Ripple Effect: Unraveling Green Innovation Diffusion in Supply Chain Networks." (**Writing Stage**)
- Jackson, I., Miller, J. & **Namdar, J.** "Loadsmart data: pricing dynamics in truckload freight pricing." (**Writing Stage**)

PRESENTATION & INVITED TALK

- "Benefits of Extreme Political Stability and Instability of Suppliers Countries for Firms: The U-Shaped Relationship." 2025 POMS Annual Conference, Atlanta, GA, USA.
- "Supply Base Innovation and Firm Productivity: Evidence from Analytics Human Resources." 2024 DSI Annual Conference, Phoenix, AZ, USA.
- "The Effect of Policy Uncertainty on Supply Chain Structure and Performance." 2023 POMS Annual Conference, Orlando, FL, USA.
- "Taking advantage of the political instability of suppliers?" 2023 POMS Annual Conference, Orlando, FL, USA.
- "How human-AI collaboration impacts demand planning." 2023 POMS Annual Conference, Orlando, FL, USA.

TEACHING INTEREST AND EXPERIENCE

TEACHING INTEREST

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|---------------------------------------|----------------------------------|
| • Business Analytics | • Supply Chain Analytics |
| • Data Wrangling & Data Visualization | • Operations Management |
| • Digital SC Transformation | • Global Supply Chain Management |

TEACHING EXPERIENCE AT ELI BROAD COLLEGE OF BUSINESS, MSU

SCM 470: Integrated Supply Chain Management Capstone (W))

- FS24-SCM-470-001: (40 Students) Instructor Evaluation: 4.39/6, & Course Evaluation: 3.94/6
- FS24-SCM-470-002: (53 Students) Instructor Evaluation: 3.90/6, & Course Evaluation: 3.71/6
- FS24-SCM-470-003: (26 Students) Instructor Evaluation: 4.81/6, & Course Evaluation: 4.38/6

TEACHING EXPERIENCE AT MIT

Feb 2023 - March 2023	Co-Instructor: SCM 294 - Digital SC Transformation (20 Graduate Students)
	• Course Evaluation: 6.7/7
January 2023	Instructor: SCM 254 - Analytical Methods for Supply Chain Management II (73 Graduate Students)
	• Instructor Evaluation: 6.1/7

TEACHING EXPERIENCE AT UIOWA**INSTRUCTOR**

May 2018 - Aug 2018	MSCI 3000: Operations Management (30 Students)
	• Instructor Evaluation: 5.5/6

TEACHING ASSISTANT

Jan 2022 - May 2022	BAIS 3250: Data Wrangling (87 Students)
	• Evaluation: 5.87/6
Aug 2021 - Dec 2021	BAIS 3250: Data Wrangling (118 Students)
	• Evaluation: 5.89/6
Aug 2020 - Dec 2020	BAIS 2800: Foundations of Business Analytics, transitioned to online instruction (90 Students)
	• Evaluation: 5.53/6
Jan 2019 - May 2019	MSCI 3000: Operations Management (122 Students)
	• Evaluation: 5.58/6
Aug 2018 - Dec 2018	MSCI 3000: Operations Management (102 Students)
	• Evaluation: 5.05/6
Jan 2018 - May 2018	MSCI 3000: Operations Management (55 Students)
	• Evaluation: 5.15/6
Aug 2017 - Dec 2017	• MSCI 3000: Operations Management (46 Students) • Evaluation: 4.43/6

Note: All evaluations are calculated based on the average over the median [Detailed evaluations are available upon request].

RESPONSIBILITIES AS TEACHING ASSISTANT

- Holding one-hour discussion (Lab) classes to supplement lectures every week.
- Operations Management: Taught ExtendSim simulation software for final projects,
- Foundations of Business Analytics: Taught Excel to practice Pivot tables, Hypothesis testing, Chi-Square tests, Regressions, Heteroskedasticity, and Multicollinearity
- Data Wrangling: Currently teaching R programming for Web Scrapping, API Packages (e.g., Twitter API), Text Wrangling & Analytics, Visualizations, Regressions, Time Series

GRANTS

Aug 2023 - Aug 2024	Detecting Concentration Areas Within Global Supply Chains	\$161,000
	• Sponsor: U.S. Government • Duration: 1 year • Role: Main Contributor • Affiliation: MIT CTL	
July 2023 - July 2024	Examining the Secondary Market of the Semiconductor Industry	\$28,000
	• Sponsor: U.S. Government • Duration: 1 year • Role: Main Contributor • Affiliation: MIT Digital Supply Chain Transformation	

INDUSTRY ENGAGEMENTS AND PROJECTS

June 2022 – March 2023	Mondelez International, Warehouse of the Future (WoF) \$290,000 • Sponsor: Mondelez International • Scope: The focus of this research was to design the roadmap for the Warehouse of the Future (WoF) for one of the largest CPGs in the world by aligning their SC and Digital Strategy visions with their warehouse operations, considering the state-of-the-art technologies in the field. • Duration: 9 months • Role: Main contributor as an expert in supply chain management • Affiliation: MIT CTL
Dec 2022	Johnson & Johnson (J&J) Round-Table, New Jersey • Sponsor: Johnson & Johnson (J&J) • Scope: Invited to a round table hosted by Johnson & Johnson (J&J) to discuss and give a talk about supply chain vulnerabilities and challenges. • Attendance: Approximately 20 directors of multinational enterprises (MNEs) • Affiliation: MIT CTL
May 2023	MIT Center for Transportation & Logistics (CTL) • Organizer: MIT CTL • Scope: Invited by the MIT Center for Transportation & Logistics (CTL) to give a talk on the topic of "A systematic approach for identifying bottlenecks in supply networks" • Attendance: Approximately 45 executives representing multinational enterprises (MNEs) • Affiliation: MIT CTL
April 2023	MIT Industry Liaison Program (ILP) • Organizer: MIT • Scope: Invited by the MIT Industry Liaison Program (ILP) to give a talk on the topic of "Building a Resilient Supply Chain." More information can be found on https://ilp.mit.edu/Supply-Chain • Attendance: Approximately 300 executives representing multinational enterprises (MNEs) • Affiliation: MIT CTL

CAPSTONE SUPERVISION

Aug 2022 – May 2023	MIT Center for Transportation & Logistics • At MIT CTL, I supervised four capstone projects in the 2022-2023 academic year. Each project involved collaborations with multinational companies, and students tackled real challenges proposed by these companies. My role included facilitating meetings, interviews, and communication between students and company representatives, as well as guiding them in data collection, methodology, and academic writing. • Resilience in Upstream Supply Network – Students: Mostafa Elzanfaly & Gianmarco Merino – Sponsor: Nike, Inc. • Calculating Financial Business Risk to Identify Supply Chain Vulnerabilities – Students: Pik Yien Lai & Romain Lucas – Sponsor: Xylem Inc. • Developing a Dynamic SOP Process for Third-Party Logistics – Students: Richard Augustus Elmquist III & Luis Rodrigo Dávila Novoa – Sponsor: Americold Logistics • Detect, Communicate, Collaborate: An agile digital network to manage disruptions – Students: Yusong Wei & Prateek Tewari – Sponsor: The Sponsor's name is withheld due to a non-disclosure agreement (NDA).
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Summer 2016 & 2017

University of Tennessee, Knoxville

- As one of the supervisors in Center for Advanced Systems Research and Education, I led international students on company visits during summers, formed groups, guided them in solving company problems, and assisted in their presentations. I facilitated meetings, interviews, and communication with company representatives and provided ongoing support with data collection, research methodologies, and academic writing.
- **Carlex Glass America LLC (10 Students)**
 - Description: Advised students to find a solution for reducing the defective rates.
- **CVG National Seat (5 Students)**
 - Description: Mentored students to develop an inventory management database.
- **Denso Corporation (4 Students)**
 - Description: Guided students to list out the root causes of defects regarding the thin-film-transistor (TFT) dashboard.

ACADEMIC SERVICES

Feb 2021

Data Collection Workshop

As a member of INFORMS Student Chapter, held a workshop to teach PhD and Masters students (Business Analytics and Finance) how to setup the API for collecting data from Bloomberg, Eikon, and WRDS (<https://jafarnamdar.github.io/Workshop.html>).

Editorial Board

- Journal of Supply Chain Management (since 2024)

Journal Referee

- Production and Operations Management
- Manufacturing & Service Operations Management (MSOM)
- International Journal of Production Research
- OMEGA - The International Journal of Management Science
- International Transactions in Operational Research
- International Journal of Physical Distribution & Logistics Management
- International Conference on Information Systems for Crisis Response and Management
- Engineering Applications of Artificial Intelligence

Session Chair

- 2025 POMS Annual Conference, Atlanta, GA
- 2024 DSI Annual Conference, Phoenix, AZ
- 2019 INFORMS Annual Meeting, Seattle, WA
- 2016 INFORMS Annual Meeting, Nashville, TN

2018 - 2021

INFORMS Student Chapter

- Treasurer of INFORMS Student Chapter, University of Iowa
- Secretary of INFORMS Student Chapter, University of Iowa

Professional Societies

- Member, INFORMS
- Member, POMS

GRADUATE COURSES

- **Empirical Courses:** Econometrics, Applied Econometrics, Causal Inference, Applied Longitudinal Analysis, Mathematical Statistics
- **Data Analytics Courses:** Big Data Analytics, Knowledge Discovery, Social Network Analysis, Statistical Learning
- **Analytical Courses:** Game Theory, Graph Theory, Linear Programming, Discrete Optimization, Convex Analysis and Optimization, Stochastic Programming, Heuristic Search, Stochastic Process, Advanced Simulation via Optimization

SKILLS

- Applied Econometrics (Software: Stata, SAS), Causal Inference (R libraries: MatchIt, Optmatch), Mediation Analysis (R library: Mediation), Synthetic Control Method (R libraries: Synth, MSCMT, CausalImpact)
- Agent-Based & Discrete-Event Simulations (Software: Object-Oriented Programing, AnyLogic, Arena)
- Social Network Analysis (Software: Gephi; Python library Networkx; R library igraph)
- Optimization Techniques (Software: Gurobi, CPLEX, GAMS, MATLAB)
- Web-Scraping (Python libraries: Selenium, BeautifulSoup), Data Analytics (Python libraries: Pandas, NumPy), Image Processing (Python libraries: OpenCV, Tesseract), Data Visualizations (Python libraries: Seaborn, Matplotlib; R library gplot2)

REFERENCES

- Prof. Arash Azadegan, Rutgers Business School—Newark, Rutgers University,
Email: Aazadegan@business.rutgers.edu
- Prof. Jennifer Blackhurst, Tippie College of Business, University of Iowa,
Email: Jennifer-blackhurst@uiowa.edu
- Dr. Elenna Dugundji, Research Scientist, MIT Center for Transportation & Logistics,
Email: Elenna_d@mit.edu
- Prof. Gautam Pant, Gies College of Business, University of Illinois Urbana-Champaign,
Email: Gpant@illinois.edu
- Prof. Sachin Modi, Carl H. Lindner College of Business, University of Cincinnati,
Email: Modisn@ucmail.uc.edu
- Dr. Maria Jesús Saénz, Director, MIT Digital Supply Chain Transformation, MIT Center for Transportation & Logistics
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