# SHI CHEN (陈实)

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#### ACADEMIC POSITION

Effective 09/2025 Foster School of Business, University of Washington, Seattle, WA

- Marion B. Ingersoll Professorship
- Professor of Operations Management

09/2020-08/2025 Foster School of Business, University of Washington, Seattle, WA

- Marion B. Ingersoll Professorship
- Associate Professor of Operations Management

05/2020-09/2020 Foster School of Business, University of Washington, Seattle, WA

- Marion B. Ingersoll Professorship
- Assistant Professor of Operations Management

09/2013-05/2020 Foster School of Business, University of Washington, Seattle, WA

Assistant Professor of Operations Management

#### **EDUCATION**

09/2008-09/2013 Stanford University, Management Science & Engineering, Stanford, CA

- Ph.D. in the field of Management Science and Engineering
- Thesis: Scheduling, Contracting, and Capacity Planning for Project-Based Supply Chain Management
- Dissertation committee members: Prof. Hau Lee, Prof. Warren Hausman, and Prof. Erica Plambeck

09/2006-06/2008 Tsinghua University, Industrial Engineering, Beijing, China

• Master of Science in Management Science & Engineering

09/2004-06/2006 Ecole Centrale Paris, Industrial Engineering, Paris, France

• Diplôme d'Ingénieur (Double-Degree Program with Tsinghua University)

09/2002-06/2004 Tsinghua University, Industrial Engineering, Beijing, China

• Bachelor of Engineering in Industrial Engineering

## **CURRENT RESEARCH INTERESTS**

- Stochastic inventory models
- Data-driven supply chain management
- Responsible and sustainable supply chains
- Renewable energy procurement and contracting
- Operations management strategies in the cloud computing industry

## FEATURED RESEARCH (PUBLICATIONS AT UTD-24 TOP BUSINESS JOURNALS)

- 1. Chen, J., Chen, S., Xie, Y., Wang, J., 2024. <u>Alliance Formations with Joint Sustainable Technology</u> Innovation Efforts. *Production and Operations Management*, forthcoming.
- 2. **Chen, S.**, Liu, Z. B., Moinzadeh, K., Tan, Y., 2024. When to Broadcast? An Analysis of Inventory Disclosure Policies for Online Flash Sales. *Information Systems Research*, forthcoming.
- 3. Chen, S., Cohen, M. A., Lee, H., 2024. Enhancing Customer-Supplier Relationship Through Customer-Managed Inventory. *Management Science*, forthcoming
- 4. **Chen, S.**, Lei, J., Moinzadeh, K., 2024. <u>Cost Optimization in Cloud Computing: Capacity Reservation for Intermittent Random Demand Surges</u>. *Production and Operations Management*, 33(6), pp.1265-1284.
- 5. Chen, S., Lei, J., Moinzadeh, K., 2023. Inventory and Supply Chain Management with Auto-

- <u>Delivery</u>. *Production and Operations Management*, 32(12), pp. 4068-4087.
- 6. Chen, S., Moinzadeh, K., Song, J. S., Zhong, Yuan., 2023. Cloud Computing Value Chains: Research from the Operations Management Perspective. Manufacturing & Service Operations Management, 25(4), pp. 1338-1356.
- 7. Chen, S., Lei, J., Moinzadeh, K., 2022. When to Lock the Volatile Input Price? Procurement of Commodity Components Under Different Pricing Schemes. Manufacturing & Service Operations Management, 24(2), pp. 1183-1201.
- 8. **Chen, S.**, Moinzadeh, K., Tan, Y., 2021. <u>Discount Schemes for the Preemptible Service of a Cloud Platform with Unutilized Capacity</u>. *Information Systems Research*, 32(3), pp. 967-986.
- 9. Arbabian, M., Chen, S., Moinzadeh, K., 2021. <u>Capacity Expansions with Bundled Supplies of Attributes: An Application to Server Procurement in Cloud Computing</u>. *Manufacturing & Service Operations Management*, 23(1), pp. 191-209.
- 10. **Chen, S.**, Lee, H., Moinzadeh, K., 2019. <u>Pricing Schemes in Cloud Computing: Reservation-Based versus Utilization-Based</u>. *Production and Operations Management*, 28(1), pp. 82-102.
- 11. Chen, S., Zhang, Q., Zhou, Y. P., 2019. <u>Impact of Supply Chain Transparency on Sustainability under NGO Scrutiny</u>. *Production and Operations Management*, 28(12), pp. 3002-3022.
- 12. **Chen, S.**, Moinzadeh, K., 2018. <u>Inventory Control and Delivery Time Quotation for Assembly Supply Chains</u>. *Operations Research*, 66(4), pp. 1004-1022.
- 13. Chen, S., Lee, H., 2017. <u>Incentive Alignment and Coordination for Project Supply Chains</u>. *Management Science*, 63(4), pp. 1011-1025.
- 14. **Chen, S.**, Lee, H., Moinzadeh, K., 2016. <u>Supply Chain Coordination with Multiple Shipment:</u> <u>Optimal Inventory Subsidizing Contracts</u>. *Operations Research*, 64(6), pp. 1320-1337.

#### OTHER PUBLICATIONS

- 15. Hou, X., Chen, S. 2024. Renewable Energy Procurement Through the Lens of Operations Management. In Responsible and Sustainable Operations The New Frontier, Springer Series in Supply Chain Management (Christopher S. Tang edited), pp.205-223.
- 16. Chen, S. 2024. Capacity Planning in the Cloud Computing Industry Under Time and Demand Uncertainties. In Foundations and Trends® in Technology, Information and Operations Management, 18(1), pp.1-21.
- 17. Lee, S., Zabinsky, Z. B., Wasserheit, J. N., Ross, J. M., Chen, S., Liu, S., 2024. <u>Impact of Vaccination and Nonpharmaceutical Interventions With Possible COVID-19 Viral Evolutions Using an Agent-Based Simulation</u>. *AJPM focus*, 3(1), p.100155.
- 18. Zhang, M., Chen, S., Luo, H., Wang, Y., 2023. No-Regret Learning in Two-Echelon Supply Chain with Unknown Demand Distribution. Proceedings of the 26th International Conference on Artificial Intelligence and Statistics (AISTATS), PMLR, 206, pp. 3270-3298.
- 19. Chen, S., Lei, J., Moinzadeh, K., 2022. Operations Management in Semiconductor and Computing Technology Industries: Capacity, Outsourcing, and Production. In Creating Values with Operations and Analytics: A Tribute to the Contributions of Professor Morris Cohen. Cham: Springer International Publishing, pp.199-233.
- 20. Chen, S., Klastorin, T., Wagner, M., 2021. <u>Designing Practical Coordinating Contracts in Decentralized Projects</u>. *Naval Research Logistics (NRL)*, 68(2), pp. 183-198.

## PAPERS UNDER REVIEW AND IN PROGRESS

- 21. Chen, S., Cohen, M. A., Lee, H. Who Directs the Control Tower? Customer vs. Supplier-Managed Inventory in Supply Chains. Under revision.
- 22. Chen, S., Luo, H., Wang, Y., Zhang, M. <u>Supply Chain Coordination under Unknown</u> <u>Demand Distribution: Online Learning and Contracting</u>. Under revision.
- 23. Chen, S., Hou, X. Collective Renewable Power Purchase Agreement. Under revision.
- 24. Chen, S., Lu, T., Tong, Y. <u>The Value of Negative Self-Disclosure in Supply Chain Social Responsibility</u>. In Preparation for Submission.
- 25. Chen, S., Lei, J., Moinzadeh, K. Supply Chain Profitability and Resilience under Diffusion of Disruption Risks. Work in Progress.
- 26. Chen, S., Moinzadeh, K., Zeng, R. Cost Optimization for the Battery-as-a-Service Model of Electric Vehicles: Inventory Management for Battery-Swapping Station Network. Work in Progress.
- 27. **Chen, S.**, Wang, P. A Dynamic Multi-Agent Framework for Collective ESG Investment: Mitigation, Greenwashing, and Strategic Trade-offs. Work in progress.

#### SERVICES AND AWARDS

- 2024 present, Associate Editor, Manufacturing & Service Operations Management
- 2020 present, Senior Editor, Production and Operations Management
- 2020 present, Marion B. Ingersoll Professorship, Foster School of Business
- 2023 2024, Secretary/Treasurer, MSOM Society Board of Officers
- 2023 2024, Arrangement Co-Chairs, 2024 INFORMS Annual Conference (Seattle, WA)
- 2023 2024, Co-Chairs, 2024 INFORMS Annual Conference Supply Chain Management Cluster (Seattle, WA)
- 2024, Co-Chairs, Third Annual Symposium on Environmental and Social Sustainability in Supply Chains (Seattle, WA)
- 2020 Dean's Award for Research of the Year, Foster School of Business
- 2018 Meritorious Service Award, Manufacturing & Service Operations Management Society
- 2017 Meritorious Service Award, Manufacturing & Service Operations Management Society

# TEACHING EXPERIENCE

- University of Washington, Foster School of Business, Seattle, WA
  - o PhD Program
    - *OPMGT 590: Stochastic Models (2021, 2022, 2023,2024)*
  - Master of Business Analytics
    - BUSAN 507: Spreadsheet Modeling for Business Enterprises (2019, 2020, 2021, 2022, 2023)
  - Master of Supply Chain Management
    - SCM 512: Spreadsheet Modeling for Business Enterprises (2017, 2018, 2019, 2020, 2021, 2022, 2023)
  - o MBA (Evening Core Course)
    - *QMETH501: Decision Support Models (2014, 2016, 2017, 2018, 2019, 2020)*
  - Undergraduate (Information Systems and Operations Management Core Courses)
    - OPMGT 301: Principles of Operations Management (2014, 2015, 2016, 2018,

- 2019, 2020, 2021, 2022, 2023, 2024)
- QMETH 450: Spreadsheet Models for Business (2021, 2022)
- IS 451: Business Data Analytics (2017)
- Stanford University, Management Science and Engineering Department, Stanford, CA
  - Master of Management Science and Engineering
    - *MS&E 260(Master of Science): Introduction to Operations Management (2012)*

## **CONFERENCE & INVITED SEMINAR PRESENTATION**

- "Supply Chain Profitability and Resilience under Diffusion of Disruption Risks"
  - 2024 Supply Chain Finance and Risk Management Workshop, Olin Business School, Washington University in St. Louis (St. Louis, MO)
  - 2024 Tsinghua University, School of Economics and Management (Beijing, China)
- "Collective Power Purchase Agreements (PPA) for Renewable Energies Negotiation and Risk Sharing Mechanisms"
  - o 2025 Tsinghua University, School of Economics and Management (Beijing, China)
  - o 2025 Soochow University, Business School (Suzhou, China)
  - o 2025 ESSEC Business School ECOMFIN Webinar Series (Online)
  - 2025 Supply Chain Management Conference on Sustainability and Social Responsibility,
    UIUC Gies College of Business (Champaign, IL)
  - o 2023 POMS International Conference (Paris, France)
  - 2023 Supply Chain Finance and Risk Management Workshop, Olin Business School, Washington University in St. Louis (St. Louis, MO)
  - o 2023 Stanford OIT Conference on Sustainability (Stanford, CA)
- "Supply Chain Coordination under Unknown Demand Distribution: Online Learning and Contracting"
  - 2025 Supply Chain Finance and Risk Management Workshop, Olin Business School, Washington University in St. Louis (St. Louis, MO)
  - 2025 Artificial Intelligence and Machine Learning in Operations Management Research Workshop AIMOR (Banff, Alberta, Canada)
  - o 2024 Fudan University, School of Management (Shanghai, China)
  - o 2023 INFORMS Annual Conference (Phoenix, AZ)
  - 2023 The 29<sup>th</sup> ACM SIGKDD Conference on Knowledge Discovery and Data Mining (Long Beach, CA)
  - o 2023 POMS Annual Conference (Orlando, FL)
- "Capacity Reservation for Intermittent Random Demand Surges: A Model for Cost Optimization in Cloud Computing"
  - o 2024 Cambridge Handbook on Digital Platforms Symposium (Los Angeles, CA)
  - o 2023 UW Industrial and Systems Engineering Department (Seattle, WA)
- "Cloud Computing Value Chains: Research from Operations Management Perspective"
  - o 2024 Dartmouth College Tuck School of Business (Hanover, NH)
  - o 2024 University of Southern California Marshall School of Business (Los Angeles, CA)

- 2021 Central University of Finance and Economics (Beijing, China)
- "When to Broadcast? An Analysis of Inventory Disclosure Policies for Online Flash Sales"
  - 2024 University of Texas at Dallas Jindal School of Management (Richardson, TX)
  - 2022 Cornell University Johnson Graduate School of Management (Ithaca, NY)
  - o 2021 MSOM Annual Conference (Bloomington, IN)
  - o 2021 Singapore Management University (Singapore)
  - o 2020 Duke University, Fuqua Business School (Durham, NC)
- "When to Lock the Price? Procurement in the Face of Input Price and Demand Volatilities"
  - o 2019 POMS Annual Conference (Washington D.C.)
- "On-Demand and Low-Priority Services: Discount Schemes for Cloud Platforms"
  - o 2019 POMS Annual Conference (Washington D.C.)
- "Pricing Strategies of Cloud Computing: Reservation-Based versus Utilization-Based"
  - o 2019 Carnegie Mellon University, Tepper School of Business (Pittsburg, PA)
  - o 2019 Georgetown University, McDonough School of Business (Washington, D.C.)
  - o 2019 UNC Kenan-Flagler Business School (Chapel-Hill, NC)
  - 2019 UCI Paul Merage Business School (Irvine, CA)
  - o 2019 University of Michigan Ross School of Business (Ann Arbor, MI)
  - o 2018 University of San Diego, School of Business (San Diego, CA)
  - o 2018 Tsinghua University, School of Economics and Management (Beijing, China)
  - o 2018 Tsinghua University, Department of Industrial Engineering (Beijing, China)
  - 2018 University of Science and Technology, School of Management (Hefei, China)
  - o 2018 MSOM Annual Conference (Dallas, TX)
  - o 2018 POMS Annual Conference (Houston, TX)
  - o 2018 UBC Sauder School of Business (Vancouver, BC, Canada)
  - o 2017 POMS Annual Conference (Seattle, WA)
  - o The Second Workshop (2017) on Innovative Market Places (Stanford, CA)
- "Impact of Supply Chain Transparency on Sustainability"
  - o 2017 POMS Annual Conference (Seattle, WA)
  - o 2016 MSOM Annual Conference (Auckland, New Zealand)
  - o 2015 INFORMS Annual Conference (Philadelphia, PA)
  - o 2015 MSOM Annual Conference (Toronto, Ontario, Canada)
  - 2015 Tsinghua University, School of Economics and Management (Beijing, China)
- "Motivating Suppliers' Pollution Abatement Investments and Pollution Reduction Efforts via Sourcing Strategies"
  - o 2017 Symposium on Innovations and Sustainability (Hong Kong, China)
  - o 2017 POMS Annual Conference (Seattle, WA)
  - o 2016 MSOM Annual Conference (Auckland, New Zealand)
- "Incentive Alignment and Coordination for Project Supply Chains"

- o 2016 Washington University at St. Louis, Olin Business School (St. Louis, MO)
- o 2016 Johns Hopkins Carey Business School (Baltimore, MD)
- o 2016 MSOM Conference, Supply Chain Management SIG (Auckland, New Zealand)
- o 2015 Santa Clara University, Leavey School of Business (Santa Clara, CA)
- o 2014 INFORMS Annual Conference (San Francisco, CA)
- 2014 MSOM Annual Conference (Seattle, WA)
- o 2014 POMS Annual Conference (Atlanta, GA)
- 2013 POMS Annual Conference (Denver, CO)
- o 2013 INFORMS Annual Conference (Minneapolis, MN)
- "Inventory Control and Delivery Time Quotation for Assembly Supply Chains"
  - o 2018 MSOM Annual Conference (Dallas, TX)
  - o 2018 POMS Annual Conference (Houston, TX)
  - o 2017 POMS Annual Conference (Seattle, WA)
  - o 2016 Washington University at St. Louis, Olin Business School (St. Louis, MO)
  - o 2016 John Hopkins Carey Business School (Baltimore, MD)
- "Material Release Scheduling in Project-Based Supply Chain Management"
  - o 2012 MSOM Annual Conference (New York, NY)
  - o 2012 POMS Annual Conference (Chicago, IL)
- "Supply Chain Coordination with Multiple Shipments"
  - o 2019 POMS Annual Conference (Washington D.C.)
  - o 2014 INFORMS Annual Conference (San Francisco, CA)
  - o 2014 MSOM Annual Conference (Seattle, WA)
  - o 2014 POMS Annual Conference (Atlanta, GA)

# **CONSULTING EXPERIENCE**

- 12/2011-08/2012 "Optimize capacity plan and project-driven supply chain management for data center capacity expansion projects," with **Google, Inc.**, Mountain View, CA. and **Stanford Graduate School of Business**, Stanford, CA.
- 09/2009-06/2010 "Optimization of the material delivery schedules for commercial construction projects," with **DCH Global, Inc.**, Scottsdale, AZ. and **Stanford Center for Integrated Facility Engineering (CIFE)**, Stanford, CA.
- 09/2006-06/2007 "Analysis of the optimal inventory control policy of the RFID-enabled container management system," with **General Motors, Inc.**, Warren, MI. and **Tsinghua Industrial Engineering Department**, Beijing, China.