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RESEARCH INTERESTS

Supply Chain Inventory Optimization
Socially and Environmentally Sustainable Supply Chains
Global Supply Chain Risk Mitigation and Resiliency
Supply Chain Digitization
Data-Driven Operations Decision Making
Manufacturing Strategies and Assemble-to-Order Systems

ACADEMIC APPOINTMENTS

Duke University, The Fuqua School of Business
R. David Thomas Professor of Business Administration
Professor with tenure, July 2003 –
The University of California at Irvine, Graduate School of Management
Associate Professor with tenure, July 1997– June 2003
Assistant Professor, July 1991- June 1997 (on-leave 1996-1998)
Columbia University, Department of Industrial Engineering and Operations Research
Assistant Professor, July 1996 - June 1998
Chinese Academy of Sciences, The Institute of Applied Mathematics
Research Fellow, January 1985- August 1986

SELECTED HONORS

- Fellow, INFORMS, 2017
- Distinguished Fellow, INFORMS Manufacturing and Service Operations (MSOM) Society, 2017
- Chang Jiang Chaired Professor (教育部长江学者讲座教授), Ministry of Education, China, 2009
- Outstanding Overseas Young Scientist Award (海外杰出青年), National Natural Science Foundation of China, 2003
- Outstanding Contribution Award, The Chinese Scholars Association for Management Science and Engineering (CSAMSE), 2017
- Distinguished Service Award, INFORMS MSOM Society, 2014

SELECTED PROFESSIONAL LEADERSHIP

- Department Editor, *Management Science*, Operations Management Department, July 2020 –
- Member, Business Studies Panel of the Hong Kong Research Grants Council (RGC), November 2020 - November 2021
- President, INFORMS Manufacturing and Service Operations Management Society (MSOM), July 2009 - June 2010; President-elect, July 2008 - June 2009
- Area Editor, *Operations Research*, Manufacturing, Service and Supply Chain Operations Area, January 2006 - December 2011
- Department Editor, *Service Science*, Supply Chain Services & Logistics Department, 2019 -
- Department Editor, *IIE Transactions*, Scheduling and Logistics Focus Issues, Supply-Chain/Production-Inventory Department, 2005-2006
- Overseas Expert (中国科学院海外评审专家), Chinese Academy of Sciences, 2017 –
- Area Coordinator, Operations Management Area, Fuqua School of Business, Duke University, July 2006 – June 2011

VISITING POSITIONS AND SPECIAL APPOINTMENTS

Tsinghua University, School of Economics and Management
Special-Term Chair Professor, 2002-2004; *Distinguished Visiting Professor*, July 2016 –
Shanghai Advanced Institute of Finance (SAIF)
Special-Term Professor of Operations Management, September 2013 -
University of Chinese Academy of Sciences, School of Management
Honorary Professor, 2017 -
Fudan University, School of Management
Chang Jiang Scholar Chair Professor, 2010–2013, *Special-Term Chair Professor*, 2013 –
2022
The National University of Singapore, School of Business
Visiting Professor, February & March 2013, December 2009 – January 2010
Cornell University, Johnson School of Management
Visiting Scholar, Fall 2012
The Chinese University of Hong Kong, School of Business, and School of Engineering
Visiting Scholar, September 2012
The South China University of Technology, Institute of Supply Chain and Service Innovation
Senior Research Fellow, 2012-2015
Hong Kong University of Science and Technology, School of Business
Visiting Scholar, July 2001; July 2012
Tongji University, College of Economics and Management
Special-Term Professor, 2009-2012
Shanghai Jiao Tong University, The Antai School of Management
Special-Term Distinguished Visiting Professor, 2007–2010
Hohai University
Hohai Special-Term Distinguished Professor, 2007–2010
Hong Kong Polytechnic University, School of Business
Visiting Scholar, July 1997
University of California at Berkeley, Dept. of Industrial Engineering & Operations Research
Visiting Scholar, July 1994 - March 1995
Columbia University, Graduate School of Business
Instructor, Fall 1990

EDUCATION

Ph.D. in Management Science, Columbia Business School, Columbia University
M.S. in Operations Research, Institute of Applied Math, Chinese Academy of Sciences
B.S. in Mathematics, Beijing Normal University

RESEARCH ACTIVITIES

Books

1. Song, J.-S. (ed.) 2023. *Research Handbook on Inventory Management*. Edward Elgar Publishing.
2. 宋京生, 李娟. 2021. 匹配的艺术: 生活乐趣背后的运营创新. 社会科学文献出版社, ISBN 978-7-5201-8290-4
Song, J.-S., J. Li. 2021. *The Art of Matching: Joy of Living and Operations Innovations*. (In Chinese.) Social Sciences Academic Press, Beijing.
3. Song, J.-S., D. Yao (eds.) 2001. *Supply Chain Structures: Coordination, Information and Optimization*, Kluwer Academic Publishers.

Journal Articles

1. Keskin, N.B., C. Li, J.-S. Song. 2023. The blockchain newsvendor: Value of freshness transparency and smart contracts. *Management Science*, forthcoming.
2. Song, J.-S., Y. Zhang. 2023. Predictive 3D printing spare parts with IoT. *Management Science*, forthcoming.
3. Zhang, Y., McCall, W., J.-S. Song. 2023. Digitizing Spare Parts Supply Chain via 3D Printing – An Operational Cost Analysis. *INFORMS Transactions on Education*, forthcoming.
4. Tang, Y., J.-S. Song. 2023. Effect of guided delegation and information proximity on multi-tier responsible sourcing. *Manufacturing & Service Operations Management*, forthcoming.
5. Chen, S., K Moinzadeh, J.-S. Song, Y. Zhong. 2023. Cloud computing value chains: Research from the operations management perspective. *Manufacturing & Service Operations Management* **25**(4), 1209-1621, C2.
6. Huang, L., J.-S. Song, R. Swinney. 2022. Managing social responsibility in multi-tier supply chains. *Manufacturing & Service Operations Management* **24**(6), 2843-2862.
7. Zhang, Y., B. Westerweel, R. Basten, J.-S. Song. 2022. Distributed 3D printing of spare parts via I.P. licensing. *Manufacturing & Service Operations Management* **24**(5), 2685-2702.
8. Shen, X., Y. Yu, J.-S. Song. 2022. Optimal policies for a multi-echelon inventory system with service time target and expediting. *Manufacturing & Service Operations Management* **24**(4), 2310-2327.
9. Song, J.-S., L. Xiao, H. Zhang, P. Zipkin. 2022. Smart policies for multi-source inventory systems and general tandem queues with order tracking and expediting. *Operations Research* **70**(4), 2421-2438.
10. Li, R., J.-S. Song, S. Sun, X. Zheng. 2022. Fight inventory shrinkage: Simultaneous learning of inventory level and shrinkage rate. *Production and Operations Management* **31**(6), 2477-2491.
11. Chen, K., J.-S. Song, J. Shang, T. Xiao. 2022. Managing hospital platelet inventory with mid-cycle expedited replenishment and returns. *Production and Operations Management* **31**(5), 2015-2037.
12. Keskin, N. B., Y. Li, J.-S. Song. 2022. Data-driven dynamic pricing and ordering with perishable inventory in a changing environment. *Management Science* **68**(3), 1938-1958.
13. Eftekhari, M., J.-S. Song, S. Webster. 2022. Prepositioning and local purchasing for emergency operations under budget, demand, and supply uncertainty. *Manufacturing & Service Operations Management* **24**(1):315-332.
14. Song, J.-S., W. McCall, R. Hayford. 2021. Building a total cost framework for 3D printed parts. *Supply Chain Management Review*, November: 28-33.
Academic paper (e-companion): 3D printing spare parts: A scalable total-cost framework for sourcing decisions.
15. Song, J.-S., Z. Xue. 2021. Demand shaping through bundling and product configuration: a dynamic multiproduct inventory-pricing model. *Operations Research* **69**(2), 361-681.
16. Dai, T., J.-S. Song. 2021. Transforming COVID-19 vaccines into vaccination. *Health Care Management Science* **24**(3), 455-459.

17. Wang, Y., B. Niu, P. Guo, J.-S. Song. 2021. Direct sourcing or agent sourcing? Contract negotiation in procurement outsourcing. *Manufacturing & Service Operations Management* **23**(2), 294–310.
18. Song, J.-S., Y. Zhang. 2020. Stock or print? Impact of 3D printing on spare parts logistics. *Management Science* **66**(9), 3860–3878.
19. Tong, J., G. DeCroix, J.-S. Song. 2020. Modeling payment timing in multiechelon inventory systems with applications to supply chain coordination. *Manufacturing & Service Operations Management* **22**(2), 346–363.
20. Song, J.-S., G-J van Houtum, J. Van Mieghem. 2020. Capacity and inventory management: Review, trends, and projections. *Manufacturing & Service Operations Management* **22**(1), 36-46.
21. Liu, F., T. Lewis, J.-S. Song, N. Kuribko. 2019. Long term partnership for achieving efficient capacity allocation. *Operations Research* **67**(4), 984–1001.
22. Chen, X., G. Cai, J.-S. Song. 2019. The cash flow advantages of 3PLs as supply chain orchestrators. *Manufacturing & Service Operations Management* **21**(2), 435–451.
23. Zhao, X., A. Lim, H. Guo, C. Ding, J.-S. Song. 2019. Retail clusters in developing economies. *Manufacturing & Service Operations Management* **21**(2), 452–467.
24. Shang, Y., D. Dunson, J.-S. Song. 2017. Exploiting big data in logistics risk assessment via Bayesian nonparametrics. *Operations Research* **65**(6), 1574-1588.
25. Ang, M., K. Sigman, J.-S. Song, H. Zhang. 2017. Closed-form approximations for optimal (r,q) and (S,T) policies in a parallel processing environment. *Operations Research* **65**(5), 1414-1428.
26. Chen, L., J.-S. Song, Y. Zhang. 2017. Serial inventory systems with Markov-modulated demand: Solution bounds, asymptotic analysis, and insights. *Operations Research* **65**(5), 1231-1249.
27. Chen, J., Q. Hu, J.-S. Song. 2017. Supply chain models with mutual commitments and implications for social responsibility. *Production and Operations Management* **26**(7), 1268-1283.
28. Song, J.-S., L. Xiao, H. Zhang, P. Zipkin. 2017. Optimal policies for a dual-sourcing inventory problem with endogenous stochastic lead times. *Operations Research* **65**(2), 379-395.
29. Liu, F., J.-S. Song. 2017. Coordinating a semi-centralized global production network through different levels of headquarters involvement. *Production and Operations Management* **26**(2), 305-319.
30. Cheung, K., J.-S. Song, Y. Zhang. 2017. Cost reduction through operations reversal. *European Journal of Operational Research* **259**(1), 100-112.
31. Chen, J., Q. Hu, J.-S. Song. 2016. Effect of partial cross ownership on supply chain performance. *European Journal of Operational Research* **258**(2), 525-536.
32. Huang, L., J.-S. Song, J. Tong. 2016. Supply chain planning for random demand surges: Reactive capacity and safety stock. *Manufacturing & Service Operations Management* **18**(4), 509-524.
33. Liu, F., J.-S. Song, J. Tong. 2016. Building supply chain resilience through virtual stockpile pooling. *Production and Operations Management* **25**(10), 1745-1762.

34. Li, Q., P. Guo, C.-L. Li, J.-S. Song. 2016. Equilibrium joining strategies and optimal control of a make-to-stock queue. *Production and Operations Management* **25**(9), 1513-1527.
35. Bhimani, S., J.-S. Song. 2016. Gaps between research and practice in humanitarian logistics. *Journal of Applied Business and Economics* **18**(1).
36. Lu, L., J.-S. Song, H. Zhang. 2015. Optimal and asymptotically optimal policies for assemble-to-order N- and W-systems. *Naval Research Logistics* **62**(8), 617-645.
37. Ang, M., J.-S. Song, M. Wang, H. Zhang. 2013. On properties of discrete (r,q) and (s,T) inventory systems. *European Journal of Operational Research* **229**, 95-105.
38. Song, J.-S., P. Zipkin. 2013. Supply streams. *Manufacturing & Service Operations Management* **15**(3), 444-457.
39. Song, J.-S., P. Zipkin. 2012. Newsvendor problems with sequentially revealed demand information. *Naval Research Logistics* **59**(8), 601-612.
40. Liu, F., J.-S. Song. 2012. Good and bad news about the (S,T) policy. *Manufacturing & Service Operations Management* **14**(1), 42-49.
41. Song, J.-S., P. Zipkin. 2011. An approximation for the inverse first-passage time problem. *Advances in Applied Probability* **43**(1), 264-275.
42. Guo, P., J.-S. Song, Y. Wang. 2010. Outsourcing structures and information flow in a three-tier supply chain. *International Journal of Production Economics* **128**(1), 175-187.
43. Lu, Y., J.-S. Song, Y. Zhao. 2010. No-holdback allocation rules for continuous-time assemble-to-order systems. *Operations Research* **58**(3), 691-705.
44. Song, J.-S., H. Zhang, Y. Hou, M. Wang. 2010. The effect of lead time and demand uncertainties in (r,q) inventory systems. *Operations Research* **58**(1), 68-80.
45. Bernstein, F., J.-S. Song, X. Zheng. 2009. Free riding in a multi-channel supply chain. *Naval Research Logistics* **56**(8), 745-765.
46. Song, J.-S., Y. Zhao. 2009. The value of component commonality in a dynamic inventory system with lead times. *Manufacturing & Service Operations Management* **11**(3), 493-508.
47. Shang, K., J.-S. Song, P. Zipkin. 2009. Coordination mechanisms for serial supply chains with batch ordering. *Management Science* **55**(4), 685-695.
48. Song, J.-S., P. Zipkin. 2009. Inventories with multiple supply sources and networks of queues with overflow bypasses. *Management Science* **55**(3), 362-372.
49. DeCroix, D., J.-S. Song, P. Zipkin. 2009. Managing an assemble-to-order system with returns. *Manufacturing & Service Operations Management* **11**(1), 144-159.
50. Lu, X., J.-S. Song, K. Zhu. 2008. Analysis of perishable-inventory systems with censored data. *Operations Research* **58**(4), 1034-1038.
51. Bernstein, F., J.-S. Song, X. Zheng. 2008. "Bricks-and-mortar" vs. "clicks-and-mortar": an equilibrium analysis. *European Journal of Operational Research* **187**(3), 671-690.

52. Shang, K., J.-S. Song. 2007. Serial supply chains with economies of scale: bounds and approximations. *Operations Research* **55**(5), 843-853.
53. Lu, X., J.-S. Song, A. Regan. 2007. Rebate, returns, and price protection policies in supply chain coordination. *IIE Transactions* **39**, 111-124.
54. Lu, X., J.-S. Song, A. Regan. 2006. Inventory planning with forecast updates: approximate solutions and cost error bounds. *Operations Research* **54**(6), 1079-1097.
55. Shang, K., J.-S. Song. 2006. A closed form approximation for serial inventory systems and its application to system design. *Manufacturing & Service Operations Management* **8**(4), 394-406.
56. Lu, X., J.-S. Song, K. Zhu. 2005. On “The censored newsvendor and the optimal acquisition of information”. *Operations Research* **53**(6), 1024-1026.
57. Lu, Y., J.-S. Song, D. Yao. 2005. Backorder minimization in multiproduct assemble-to-order systems. *IIE Transactions* **37**(8), 763-774.
58. DeCroix, D., J.-S. Song, P. Zipkin. 2005. A series system with returns: stationary analysis. *Operations Research* **53**(2), 350-362.
59. Lu, Y., J.-S. Song. 2005. Order-based cost optimization in assemble-to-order systems. *Operations Research* **53**(1), 151-169.
60. Choi, K.-S., J.G. Dai, J.-S. Song. 2004. On measuring supplier performance under vendor-managed-inventory programs in capacitated supply chains. *Manufacturing & Service Operations Management* **6**(1), 53-72.
61. Drezner, Z., C. Scott, J.-S. Song. 2003. The central warehouse location problem revisited. *IMA Journal of Management Mathematics* **14**, 321-336.
62. Boyaci, T., G. Gallego, K. Shang, J.-S. Song. 2003. Erratum to bounds in “serial production/distribution systems under service constraints”. *Manufacturing & Service Operations Management* **5**, 372-374.
63. Dayanik, S., J.-S. Song, S. Xu. 2003. The effectiveness of several performance bounds for capacitated production, partial-order-service assemble-to-order systems. *Manufacturing & Service Operations Management* **5**, 230-251.
64. Shang, K., J.-S. Song. 2003. Newsvendor bounds and heuristic for optimal policies in serial supply chains. *Management Science* **49**(5): 618-638.
65. Lu, Y., J.-S. Song, D. Yao. 2003. Order fill rate, leadtime variability, and advance demand information in an assemble-to-order system. *Operations Research* **51**, 292-308.
66. Song, J.-S., D. Yao. 2002. Performance analysis and optimization of assemble-to-order systems with random leadtimes. *Operations Research* **50**, 889-903.
67. Song, J.-S. 2002. Order-based backorders and their implications in multi-item inventory systems. *Management Science* **48**, 499-516.
68. Chen, F., J.-S. Song. 2001. Optimal policies for multi-echelon inventory problems with Markov-modulated demand. *Operations Research* **49**, 226-234.

69. Song, J.-S., C. Yano, P. Lerssrisuriya. 2000. Contract assembly: dealing with combined supply lead time and demand quantity uncertainty. *Manufacturing & Service Operations Management* **2**, 287-296.
70. Song, J.-S. 2000. A note on assemble-to-order systems with batch ordering. *Management Science* **46**, 739-743.
71. Song, J.-S., S. Xu, B. Liu. 1999. Order-fulfillment performance measures in an assemble-to-order system with stochastic leadtimes. *Operations Research* **47**, 131-149.
72. Song, J.-S. 1998. On the order fill rate in multi-item, base-stock systems. *Operations Research* **46**, 831-845.
73. So, K., J.-S. Song. 1998. Price, delivery time guarantees and capacity selection. *European Journal of Operations Research* **111**, 28-49.
74. Song, J.-S., P. Zipkin. 1996. Inventory control with information about supply conditions. *Management Science* **42**, 1409-1419.
75. Song, J.-S., P. Zipkin. 1996. The joint effect of leadtime variance and lot size in a parallel processing environment. *Management Science* **42**, 1352-1363.
76. Song, J.-S., P. Zipkin. 1996. Evaluation of base-stock policies in multiechelon inventory systems with state-dependent demands: Part II: state-dependent depot policies. *Naval Research Logistics* **43**, 381-396.
77. Song, J.-S., P. Zipkin. 1996. Managing inventory with the prospect of obsolescence, *Operations Research* **44**, 215-222.
78. Song, J.-S. 1994. Understanding the leadtime effects in stochastic inventory systems with discounted costs. *Operations Research Letters* **15**, 85-93.
79. Song, J.-S. 1994. The effect of leadtime uncertainty in a simple stochastic inventory model. *Management Science* **40**, 603-613.
80. Song, J.-S., P. Zipkin. 1993. Inventory control in a fluctuating demand environment. *Operations Research* **41**, 351-370.
81. Song, J.-S, P. Zipkin. 1992. Evaluation of base-stock policies in multiechelon inventory systems with state-dependent demands: Part I: State-independent policies. *Naval Research Logistics* **39**, 715-728.
82. Song, J.-S. 1988. Continuous-time Markov decision processes with non-uniformly bounded transition rates. *Scientia Sinica (Series A)*, (English Edition) **XXXI**, 1281-1291.
83. Dong, Z, J.-S. Song. 1988. A secondary approach to the discounted model in semi-Markov decision processes. *Science Bulletin*, (English Edition) **33**, 448-454.
84. Song, J.-S., Z. Dong. 1987. A note on continuous-time Markov decision processes with undiscounted cost criterion. *Science Bulletin*, (Chinese Edition) **32**, 1201-1205.

Book Chapters

1. Song, J.-S. Inventory. In Petropoulos, F. et al., 2024. Operational Research: Methods and Applications. *Journal of the Operational Research Society*. Published online.

2. Shang, K., J.-S. Song, S. Zhou. 2023. Single-stage approximations of multiechelon inventory models. Chapter 5, Song, J.-S. (ed.) *Research Handbook on Inventory Management*. Edward Elgar Publishing.
3. DeValve, L., J.-S. Song, Y. Wei. 2023. Assemble-to-order systems. Chapter 9, Song, J.-S. (ed.) *Research Handbook on Inventory Management*. Edward Elgar Publishing.
4. Shang, K., J.-S. Song. 2023. Inventory models with financial flows. Chapter 16, Song, J.-S. (ed.) *Research Handbook on Inventory Management*. Edward Elgar Publishing.
5. Song, J.-S., P. Zipkin. 2003. Supply chain operations: assemble-to-order systems. Chapter 11, 561-596, T. De Kok, S. Graves. (eds.) *Supply Chain Management. Handbooks in Operations Research and Management Science*, Vol. 30. North-Holland, Amsterdam.

Working Papers

1. Chen, S., J.-S. Song, Y. Wei. 2023. Data-driven scalable e-commerce transportation network design with unknown flow response.
2. Deng, T., F. Shao, J.-S. Song, Y. Yu. 2023. Bill-of-materials flexibility for supply chain resiliency.
3. Keskin, N. B., X. Min, J.-S. Song. 2023. The nonstationary newsvendor: Data-driven nonparametric learning.
4. Guo, Y., F. Liu, J.-S. Song, S. Wang. 2023. Supply chain resilience: A review from the inventory management perspective.
5. Shi, Y. L. Alwan, S. Raghunathan, J.-S. Song, X. Yue. 2023. Automating supply chain contracts in the presence of demand shifts and contract execution lag.
6. Chen, J. Q. Ding, L. Ren, J.-S. Song. 2023. Integrated capacity and exchange rate hedging in multi-markets under value-at-risk.
7. Deng, T., J.-S. Song, Y. Yu. 2023. Conditional leadtime flexibility in an assemble-to-order system.
8. Lewis, T., F. Liu, J.-S. Song. 2023. A dynamic mechanism for achieving sustainable quality supply.
9. Song, J.-S., Z. Xue, X. Shen. 2023. Dynamic pricing and inventory control of substitutable products in a nonstationary environment.
10. Song, J.-S., L. Xiao, H. Zhang. 2023. Optimal dual-sourcing policies for backlogging and lost-sales inventory systems with uncertain lead times and order tracking.
11. Deng, Y., Y. Li, J.-S. Song. 2022. A unified parsimonious model for structural demand estimation accounting for stockout and substitution.
12. Liu, S., Z. Shi, J.-S. Song. 2022. Exploiting user base and product-return data to optimize end-of-life spare parts supply.
13. Hong, X., J.-S. Song, X. Tian, S. Wang, T. Wu. 2021. Value of public real-time crime information: evidence from bike share detouring behavior.
14. Chen, S., L. Lu, J.-S. Song, H. Zhang. 2021. Optimizing assemble-to-order systems: Decomposition heuristics and scalable algorithms.

15. Li, X., J.-S. Song, J. Chen. 2020. Equilibrium channel structures for branded variants under uniform and non-uniform pricing.
16. Keskin, N. B., X. Min, J.-S. Song. 2020. A geotemporal clustering model for COVID-19 projection.
17. Chen, J., Q. Hu, J.-S. Song. 2017. Contract types and supplier incentives for quality improvement.
18. Musalem, A., Y. Shang, J.-S. Song. 2016. An empirical study of customer spillover learning about service quality.
19. Deng, C., S. Pekec, J.-S. Song. 2015. Teaming up for sustained performance: A repeated-game model of voluntary horizontal collaboration.
20. Hu, W., J.-S. Song, H. Zhang. 2007. On “Resource Flexibility with Responsive Pricing”.
21. Zheng, X., J.-S. Song. 2007. e-Fulfillment: vertical vs. horizontal cooperation.
22. Lu, X., J.-S. Song, K. Zhu. 2006. Inventory control with unobservable lost sales and Bayesian updates.
23. Singh, M., J.-S. Song, C. Yano, A. Moreno-Beltran. 2004. Production and repair decisions with time-consuming repair and a deadline.

Awards

- Finalist, 2022 INFORMS Case Competition
- Honorable mention, Student Paper Competition, POMS International Conference in China, Xi’an, June 2022
- Winner, Best Paper Competition at Digital Supply Chain and Supply Diversity Conference @ Rutgers Business School, June 2022
- Winner, Best Paper Competition at CSAMSE Annual Conference in Chengdu, China, 2019
- Finalist for the POMS HOCM Best Paper Award Competition, 2017, 2019
- Third Prize, Best Paper Competition at CSAMSE Annual Conference in Hefei, China, 2016
- Winner, Best Paper Competition at CSAMSE Annual Conference in Beijing, China, 2013
- Second Prize, Best Paper Competition at CSAMSE Annual Conference in Suzhou, China, 2012
- Supervised-student research prize: Jiguang Chen, The Emerging Economies Doctoral Student Award, POMS, 2012
- Supervised-student research prize: Zhengliang Xue, Finalist, 2007 POMS Supply Chain Management Student Paper Competition
- Supervised-student research prize: Kevin Shang, first prize winner, 2001 M&SOM Student Paper Competition

Grants & Fellowships

- National Natural Science Foundation of China Research Grant No. 70731003, 2014-2018
- Chang Jiang Chaired Professor (教育部长江学者讲座教授), Ministry of Education, China, 2009
- National Natural Science Foundation of China Research Grant No. 70731003, 2008-2011
- Outstanding Overseas Young Scientist Award (海外杰出青年), National Natural Science Foundation of China, 2003
- National Science Foundation Research Grant 2000-2003
Multiproduct Assemble-to-Order Systems: Performance Optimization and Supply Chain Application

- National Science Foundation Research Grant 1997-2000
Design and Control of Multi-Item, Assemble-to-Order Inventory Systems: An Order-Based Approach
- National Science Foundation Research Planning Grant 1995-1996
Preliminary Studies on Order-Based Performance in Multi-Item Inventory Systems
- The Anderson Consulting Outstanding Faculty Award, Graduate School of Management, University of California, Irvine, 1993
- Faculty Career Development Award, University of California, Irvine, 1992.
- Fellowship, Graduate School of Business, Columbia University, 1987-1991.

TEACHING ACTIVITIES

Courses Taught

MMS core course:

- Introduction to Operations and Supply Chain Management

MBA & Executive MBA core courses:

- Operations Management
- Management Science

MBA & Executive MBA elective courses:

- Global Operations
- Supply Chain Management
- Global Academic Travel Experience - China
- Field Studies in Operations Management
- Management Science I.T. Lab

Engineering Master Program courses:

- Operations Management
- Design and Management of Production and Service Systems
- Facilities Layout and Planning
- Production Management

Undergraduate course:

- Quantitative Methods for Management

Ph.D. courses:

- Foundation of Inventory Management
- Stochastic Comparison: Theory and Applications
- Supply Chain Optimization
- Current Research Topics in Supply Chain Management
- Inventory Planning Models
- Foundations of Optimization

Online lecture:

Song, J.-S. 2012. "Inventory and Supply Chain Strategies," in Van Mieghem, J.A. (ed.), *Operations Strategy: The Marketing & Management Collection*, Henry Stewart Talks Ltd, London

Teaching cases:

1. Zhang, Y., McCall, W., J.-S. Song. 2022. Digitizing Spare Parts Supply Chain via 3D Printing – An Operational Cost Analysis.
2. McCall, W., J.-S. Song. 2021. 3D Printing Spare Parts: A Total Cost Perspective.
3. Dai, T., J.-S. Song. 2021. COVID-19 Vaccination Challenge: A Process Flow View.

Ph.D. Students

1. Kevin H. Shang (2002)
Dissertation: *Simple Solutions to Supply Chain Inventory Management*

- Placement: Duke University, Fuqua School of Business
2. Xiaona Zheng (2005)
Dissertation: *Essays on Multi-Channel Supply Chains*
Placement: Peking University, Guanghua School of Management
 3. Zhengliang Xue (2008)
Dissertation: *Integrated Marketing and Operations Strategies: Multiproduct Demand Shaping and Inventory Planning*
Placement: IBM Watson Research Center
 4. Fang Liu (2011)
Dissertation: *Coordination Mechanism Design for Sustainable Global Supply Networks*
Placement: Nanyang Technological University, Nanyang Business School
 5. Jordan Tong (2012)
Dissertation: *Inventory Management and Supply Chain Finance: Theory and Empirics*
Placement: University of Wisconsin-Madison, Wisconsin School of Business
 6. Jiguang Chen (2013, Fudan University)
Dissertation: *Coopetition in a Supply Chain*
Placement: Shangdong University, School of Business
 7. Lu Huang (2015)
Dissertation: *Responsible Sourcing and Supply Chain Risk Management*
Placement: Google Inc., Operations Decision Support
 8. Yan Shang (2016)
Dissertation: *Essays in Empirical Operations Management: Bayesian Learning of Service Quality and Structural Estimation of Complementary Product Pricing and Inventory Management*
Placement: Facebook, Inc.
 9. Yue Zhang (2017)
Dissertation: *Global Supply Chain Management with Advanced Information and Production Technologies*
Placement: Pennsylvania State University, The Smeal College of Business
 10. Chengyu Wu (2019)
Dissertation: *Effective Heuristics for Dynamic Pricing and scheduling Problems with High Dimensionality*
Placement: T-Mobile
 11. Yuexing Li (2022)
Dissertation: *Data-driven Decision Making with Dynamic Learning under Uncertainty: Theory and Applications*
Placement: Johns Hopkins Carey Business School
 12. Shuyu Chen (2022)
Dissertation: *Design and Performance Prediction for Supply Chain Systems with Graphical Structures*
Placement: American Airlines, Operations Research & Advanced Analytics

Postdoctoral Fellows Supervised

13. Yingdong Lu (1999-2000)
Topic: *Assemble-to-Order Systems with Random Leadtimes*
Placement: IBM Watson Research Center
14. Xiangwen Lu (2002-2003)
Topic: *Forecasting and Inventory Control*
Placement: Department of Industrial Engineering, Hong Kong University of Science and Technology

PROFESSIONAL ACTIVITIES

Professional Memberships

- The Institute of Operations Research and Management Science (INFORMS)

- INFORMS Manufacturing and Service Operations Management Society (MSOM)
- INFORMS Applied Probability Society (APS)
- Production and Operations Management Society (POMS)
- APICS

Editorial Positions

- Department Editor, *Management Science*, Operations Management Department, July 2020 -
- Department Editor, *Service Science*, Supply Chain Services & Logistics Department, 2019 - 2023
- Area Editor, *Operations Research*, Manufacturing, Service and Supply Chain Operations Area, 2006-2011
- Department Editor, *IIE Transactions*, Scheduling and Logistics Focus Issues, Supply-Chain/Production-Inventory Department, 2005-2006
- Editorial Board, *Stochastic Models*, 2019 -
- Associate Editor, *Management Science*, 2000-2007, 2017 –June 2020
- Associate Editor, *Manufacturing & Service Operations Management*, 2006-2007
- Associate Editor, *Operations Research*, 1997-2006; Meritorious Service Award, 2001, 2002
- Associate Editor, *Naval Research Logistics*, 2003-2006
- Associate Editor, *IIE Transactions*, 2000-2005
- Editorial board, *Service Science*, 2015-
- Editorial board, *Manufacturing & Service Operations Management*, 1999-2006
- Referee for *European Journal of Operational Research*, *IEEE Transactions*, *IIE Transactions*, *INFOR*, *Management Science*, *Mathematical Analysis and Applications*, *Mathematics of Operations Research*, *Naval Research Logistics*, *Operations Research*

Leadership & Services

INFORMS Manufacturing and Service Operations Management (MSOM) Society

- President, July 2009-June 2010; President-elect, July 2008-June 2009
- MSOM Fellows Committee, 2010, 2018
- MSOM Service Award Committee
- Chair, MSOM Young Scholar Award Committee, 2014, 2015
- Inaugural MSOM Young Scholar Award Committee, 2013
- Chair, M&SOM Best Paper Award Committee, 2011

INFORMS

- Panel member, INFORMS Fellow Selection Committee, 2023
- Member, INFORMS George Nicholson Prize Committee, 2015, 2016
- Chair, INFORMS Dantzig Dissertation Award Committee, 2007
- Member, INFORMS Dantzig Dissertation Award Committee, 2006
- Member, Committee on WORMS Award for the Advancement of Women in OR/MS. 2005, 2010
- Judge, INFORMS-Junior Faculty Interest Group Paper Competition, 2004-2006

CSAMSE (Chinese Scholars Association for Management Science and Engineering)

- Vice President. August 2019 –
- Chair, CSAMSE Best Paper Award Committee, 2017, 2018, 2019, 2021-23
- Judge, Best Paper Award, CSAMSE Conference, Shanghai, 2009, 2010

External Review Panels

- Chair, External Review Panel, MSc in Global Operations Program (MSGO) at HKUST Business School, Hong Kong University of Science and Technology, 2022

- Member, Business Studies Panel of the Hong Kong Research Grants Council (RGC), November 2020-October 2021
- Panelist, NSF Future Manufacturing Program, July 2020
- Chair, External Review Panel, MSc in Global Operations Program (MSGO) at HKUST Business School, Hong Kong University of Science and Technology, 2017
- Panelist, National Science Foundation, Manufacturing Enterprise Systems program, 2008
- External Examiner, Executive M.Sc. in E-Commerce and Logistics Technologies, Chinese University of Hong Kong, 2010-2012
- External Examiner, Executive M.Sc. in Logistics and Supply Chain Management, Chinese University of Hong Kong, 2007-2010
- Panelist, National Science Foundation, DMII, 1999, 2001, 2008

Selected Plenary/Keynote/Invited Workshop Speeches

- Keynote speech, International Workshop on Internet-plus Manufacturing and Services Operations Management, Shenyang, China, August 2023
- Keynote speech, POMS-Hong Kong, January 2023
- Keynote speech, The Third National Conference on Supply Chain Management and Operations Management (ISCOM 2022), Changsha, China, December 2022
- Keynote speech, Workshop on Innovation and Information Management, HKU Business School, July 2022
- Keynote speech, POMS International Conference, Xi'an, China, June 2022
- Keynote speech, Digital Supply Chain and Supply Diversity Conference @ Rutgers Business School, June 2022
- Keynote speech, International Workshop on Internet-plus Manufacturing and Services Operations Management, Shenyang, China, December 2021
- Keynote speech, Sino-Canada Symposium on Smarter Supply Chain, Soochow University, School of Business, October 2021
- Invited speech, Distinguished speaker series, Northeastern University, November 2020
- Keynote speech, Workshop on Management Science and Engineering, Beijing Institute of Technology, November 2019
- Keynote speech, International Society of Inventory Research (ISIR) Summer School 2019, K.U. Leuven, Belgium, August
- MSOM Distinguished Fellow Speech, Chapel Hill, NC, June 2017
- Invited speech, *Workshop in Honor of John A. Buzacott's 80th Birthday*, Chapel Hill, NC, June 2017
- Invited speech, *Mostly O.M. Workshop*, Tsinghua University, May 2017
- Invited speech, *UNC Leadership Summit on Global Commerce -- Emerging Practices in Global Sourcing*, Chapel Hill, NC, April 2017
- Invited speech, *Global Operations Workshop*, University of Miami, Business School, February 2017
- Keynote speech, Dalian, June 2016
- Plenary speech, CSAMSE Annual Conference in Beijing, China, June 2013
- Plenary talk, Invitation Program for U.S. Business School Educators, Keizai Koho Center (Japan Institute for Social and Economic Affairs), May 25-29, 2009, Tokyo, Japan
- Distinguished Speaker Series, 2 Day's Lectures on Recent Research Development in Supply Chain Management, Southwest Jiaotong University, Chengdu, China, May 2009
- Plenary talk, Supply Chain Management Workshop of HKUST Supply Chain Center, Sanya, Hainan, China, December 2008
- Invited speech, Seminar in Copenhagen in Honor of Sven Axsater, Copenhagen, November 2008
- Keynote speech, Global Logistics Conference, Kuehne School of Logistics, Hamburg, Germany, September 2008

- Keynote Speech, Meeting of Euro Working Group on Stochastic Modeling 2008, Koc University, Istanbul, Turkey, June 2008
- Discussion panelist, IBM Faculty Summit, 2004

Selected Invited University Research Seminar Talks

2023

Wilfrid Laurier University, Lazaridis School of Business & Economics
 Purdue University, Mitchell E. Daniels, Jr. School of Business
 Columbia University, Columbia Business School
 New York University, Stern School of Business
 MIT Operations Research Center
 University of Illinois at Urbana-Champaign, Gies College of Business

2022

The University of Pennsylvania, The Wharton School
 Boston College, Carroll School of Management
 Georgia Institute of Technology, Scheller College of Business
 Arizona State University, W. P. Carey School of Business
 University of Science and Technology of China, School of Management
 The Ohio State University, Fisher College of Business

2021

INSEAD
 Nanjing University, School of Engineering Management
 Beijing Institute of Technology, School of Management and Economics
 Boston University, School of Business
 MIT Data Science Lab
 Bilkent University, Department of Industrial Engineering
 The Chinese University of Hong Kong, School of Business
 Huazhong University of Science and Technology
 University of Chinese Academy of Sciences, School of Economics and Management
 Northeastern University

2020

Cornell University, SC Johnson College of Business
 Northeastern University, Center for Artificial Intelligence and Data Science

2019

The Eindhoven University of Technology, School of Industrial Engineering
 Erasmus University, Rotterdam School of Management
 The University of Illinois at Chicago, School of Business
 The University of Chicago, Booth School of Business
 Hunan University of Technology
 Beijing Institute of Technology, School of Management and Economics
 University of Chinese Academy of Sciences, School of Management
 Xiamen University, School of Business
 Fudan University, School of Management

2018

London Business School
 University College London, School of Business
 Case Western University, School of Business
 The University of Minnesota, Department of ISyE
 Syracuse University, School of Business

Tongji University, School of Business
Shanghai University of Finance and Economics
Fudan University, School of Management
Zhejiang University, School of Business
Ningbo Supply Chain Innovation Institute China
Central-South University, School of Business
Hunan Business School
Beijing University of Technology, School of Business
Beijing University of Posts and Telecommunications, School of Sciences
Chinese Academy of Sciences, Academy of Mathematics and System Science

2017

Tsinghua University, Department of Industrial Engineering
Peking University, Guanghua School of Management
University of Academy of Sciences, School of Management
Henan University of Science and Technology, School of Mathematics and Statistics
College of William and Mary, School of Mathematics
Columbia University, School of Engineering
Peking University, School of Engineering
University of Science and Technology of China, School of Management
Hong Kong University of Science and Technology, School of Business
Hong Kong University, School of Business
The City University of Hong Kong, School of Business
Hong Kong Polytechnic University, School of Engineering

2016

Tsinghua University, School of Economics and Management
The University of Michigan, Ross School of Business
Fudan University, School of Management
Dongbei University of Finance and Economics
Peking University, Guanghua School of Management

2015

Fudan University, School of Management
Shanghai Jiaotong University, School of Economics and Management
Shanghai University of Finance and Economics
Beijing Foreign Studies University, School of Business
Chinese Academy of Sciences, Academy of Mathematical and System Sciences
Hubei University of Science and Technology, School of Economics and Management

2014

Singapore University of Technology and Design, Pillar of Engineering Systems and Design
Tongji University, School of Economics and Management
Fudan University, School of Management
Henan University of Science and Technology, School of Mathematics and Statistics
Northeastern University, The Logistics Institute
University of North Carolina, Charlotte, School of Business

2013

National University of Singapore, School of Business
South China University of Technology, Institute of Supply Chain and Service Innovation
University of North Carolina at Chapel Hill, School of Engineering
University of California at San Diego, Rady School of Management
Arizona State University, W.P. Carey School of Business

- 2012
Stanford University, Graduate School of Business
University of California at Berkeley, Hass School of Business
Fudan University, School of Management
Hong Kong University of Science and Technology, School of Business
Chinese University of Hong Kong, School of Business
South China University of Technology, Institute of Supply Chain and Service Innovation
Cornell University, Johnson School of Management
Washington University, Olin School of Business
University of California at Riverside, Graduate School of Management
- 2011
Boston University, School of Business
The University of Pittsburg, School of Business
Georgetown University, School of Business
University of Washington, Seattle, Foster School of Business
University of Maryland, College Park, Smith School of Business
East China Normal University, School of Business
- 2010
The National University of Singapore, School of Business
Singapore Management University
INSEAD
Northwestern University, Department of Industrial Engineering
Wilfrid Laurier University, School of Business
Fudan University, School of Management
Hohai University, School of Management
The University of Chicago, Booth School of Business
The University of Texas A&M, Department of Industrial and System Engineering
MIT, Operations Research Center, and Sloan School of Management
- 2009
Northwestern University, Kellogg School of Business
Shanghai Jiaotong University, Antai School of Management
Fudan University, School of Management
Carnegie Mellon University, Tepper School of Management
The University of Michigan, Ross School of Business
- 2008
University of North Carolina at Chapel Hill, Kenan-Flagler Business School
Columbia University, Graduate School of Business & Department of IEOR
The University of British Columbia, School of Business
- 2007
Shanghai Jiaotong University, Antai School of Management
The University of Texas at Dallas, School of Management
University of Illinois, Urbana-Champaign, Department of Industrial Engineering
The University of California, Irvine, Graduate School of Management
The University of Southern California, Marshall School of Business
Hohai University, School of Management
- 2006
Peking University, Guanghua School of Management
National Natural Science Foundation of China
Nanjing University, School of System Engineering
Chinese Academy of Sciences, The Academy of Mathematical Sciences
New York University, Stern School of Business
Cornell University, School of Operations Research and Industrial Engineering
- 2005
Pennsylvania State University, Smeal College of Business

- Washington University at St. Louis, Olin School of Business
- 2004
 - The University of North Carolina, Department of Statistics and Operations Research
 - Duke University, Fuqua School of Business
 - North Carolina State University, Department of IEOR
 - Northwestern University, Kellogg School of Business
- 2003
 - Duke University, Fuqua School of Business
 - The University of British Columbia, School of Business
 - The University of Washington at Seattle, School of Business
 - Northwestern University, Department of Industrial Engineering
 - Tulane University, School of Business

Selected Conference Activities

- Program Committee, CESAMSE Conference, 2008-2023
- Cluster Chair and Co-Chair, INFORMS San Diego 1997, Salt Lake City 2000, Seattle 2007, INFORMS International Conference, Hong Kong 2006
- Program Chair, International Conference on Global Supply Chain Management, Beijing, 2002
- Session Chair in numerous INFORMS national meetings

UNIVERSITY SERVICE

Duke University

- Fuqua MQM program review committee, Spring 2022
- Faculty Advisor, APICS Duke Student Chapter, 2015-2019
- Academic Council, 2015-2017
- China Faculty Council, 2011-2014
- Fuqua China committee, 2011
- Area Coordinator, Fuqua Operations Area, 2006-2011
- Fuqua Executive Committee, 2005-2007
- Fuqua Strategic Alliances Task Force, 2004-2005
- Ph.D. Area Coordinator, Fuqua Operations Area, 2003-2005
- Various ad hoc committees and committee chairs for faculty promotions, 2003-

University of California, Irvine

- Council on Research, Computing, and Library Resources, 2000-2003
- Chair, Ad hoc Committee for Pacific Rim Research, 2000-2001
- Ad hoc Committee for Pacific Rim Research, 2001-2002
- Search Committee for Research Librarian for Business, 2002-2003
- Representative to Representative Assembly of the Academic Senate, 1993-1995
- Student Fee Advisory Committee, 1995-1996
- Geometry/Topology Faculty Recruiting Committee, Department of Mathematics, School of Physical Sciences, 2002-2003
- GSM Personnel Committee, 1999-2000, 2001-2003
- Area Coordinator, Operations and Decision Technologies, 1995-1996, 1999-2000
- GSM Master Program Committee, 1992-1994, 1995-1996, 2000-2002
- GSM Ph.D. Program Committee, 2001-2002
- GSM ITM Implementation Task Force, 1998-2001
- Chair, GSM Faculty Computing Committee, 1998-1999
- ODT Colloquia Coordinator, GSM, Fall 1992, 1993-1994, 1999-2000, 2001-2002

INDUSTRY ADVISING/CONSULTING ACTIVITIES

- ATK North America

- Auto parts inventory control system development – replenishment policies and cost parameter estimations
- Bowers/Masco
 - Improving customer order fill rate – production scheduling and stock allocation
- Disneyland
 - Outdoor vending operational efficiency -- waiting time reduction
 - Merchandise-store labor optimization
 - Spare-part inventory management
 - Outdoor vending warehouse design (facility layout)
- J.B. Hunt
 - Truck dispatching scheduling and routing
 - Railroad shipment efficiency; storage waiting time reduction
- Lucky Stores
 - Outbound trucks loading and unloading efficiency
- In-N-Out
 - Demand forecasting and labor optimization