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EDUCATION

Ph.D. in Management Science, Columbia Business School, Columbia University, 1991.
M.S. in Operations Research, Institute of Applied Mathematics, Chinese Academy of Sciences, 1984
B.S. in Mathematics, Beijing Normal University, 1982.

ACADEMIC APPOINTMENTS

Duke University, The Fuqua School of Business
Professor with tenure, July 2003 – present
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

VISITING POSITIONS

Fudan University, School of Management, Department of Management Science
Chang Jiang Chaired Professor, February 2010 -
National University of Singapore, School of Business, Department of Decision Sciences
Visiting professor, December 2009 – January 2010
Tongji University, College of Economics and Management
Guest Professor, November 2009 -
Shanghai Jiao Tong University, The Antai School of Management
Distinguished Visiting Professor by special appointment, January 2007 – January 2010
Hohai University
Hohai Distinguished Professor by special appointment, July 2007 – June 2010
Tsinghua University, School of Economics & Management
Chaired Professor by special appointment, May 2002 - May 2004.
Columbia University, Graduate School of Business
Instructor, September 1990 – December 1990
University of California at Berkeley, Department of Industrial Engineering and Operations Research
Visiting Scholar, July 1994 - March 1995

HONORS & GRANTS

- Chang Jiang Scholar, The Ministry of Education, China, 2009
- Invited participant, 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, Meeting of Euro Working Group on Stochastic Modeling 2008, Koc University, Istanbul, Turkey, June 2008
- Keynote speech, Global Logistics Conference, Kuehne School of Logistics, Hamburg, Germany, September 2008
- National Natural Science Foundation of China Research Grant No. 70731003, 2008-2011
- Outstanding Overseas Chinese Young Scientist Award, National Natural Science Foundation of China, 2003-2006
- Meritorious Service Award, *Operations Research*, 2002
- Meritorious Service Award, *Operations Research*, 2001
- National Science Foundation Research Grant 2000-2003
Multi-Product 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.
- Young Researcher Prize, The Institute of Applied Mathematics, Chinese Academy of Sciences, Beijing, 1985

RESEARCH ACTIVITIES

Book

Song, J.-S. and D. Yao (eds.) 2001. *Supply Chain Structures: Coordination, Information and Optimization*, Kluwer Academic Publishers.

Published and Forthcoming Articles

1. Liu, F. and J.-S. Song. 2011. Good and bad news about the (S,T) policy. *Manufacturing & Service Operations Management*. Published online before print October 28, 2011.
2. Song, J.-S. and P. Zipkin. 2011. An approximation for the inverse first-passage time problem. *Advances in Applied Probability* **43**(1), 264-275.
3. Guo, P., J.-S. Song and Y. Wang. 2010. Outsourcing structures and information flow in a three-tier supply chain. *International Journal of Production Economics* **128** (1), 175-187.
4. Lu, Y., J.-S. Song and Y. Zhao. 2010. No-holdback allocation rules for continuous-time assemble-to-order systems. *Operations Research* **58** (3), 691-705.
5. Song, J.-S., H. Zhang, Y. Hou and M. Wang. 2010. The effect of lead time and demand uncertainties in (r,q) inventory systems. *Operations Research* **58** (1), 68-80.
6. Bernstein, F., J.-S. Song and X. Zheng. 2009. Free riding in a multi-channel supply chain. *Naval Research Logistics* **56** (8), 745-765.

7. Song, J.-S. and Y. Zhao. 2009. The value of component commonality in a dynamic inventory system with lead times. *Manufacturing & Service Operations Management* **11** (3), 493-508.
8. Shang, K., J.-S. Song and P. Zipkin. 2009. Coordination mechanisms for serial supply chains with batch ordering. *Management Science* **55** (4), 685-695.
9. Song, J.-S. and P. Zipkin. 2009. Inventories with multiple supply and demand sources and networks of queues with overflow bypasses. *Management Science* **55** (3), 362-372 .
10. DeCroix, D., J.-S. Song and P. Zipkin. 2009. Managing an assemble-to-order system with returns. *Manufacturing & Service Operations Management* **11** (1), 144-159.
11. Lu, X., J.-S. Song and K. Zhu. 2008. Analysis of perishable-inventory systems with censored data. *Operations Research* **58** (4), 1034-1038.
12. Bernstein, F., J.-S. Song and X. Zheng. 2008. "Bricks-and-mortar" vs. "clicks-and-mortar": an equilibrium analysis. *European Journal of Operational Research* **187** (3), 671-690.
13. Shang, K. and J.-S. Song. 2007. Serial supply chains with economies of scale: bounds and approximations. *Operations Research* **55** (5), 843-853.
14. Lu, X., J.-S. Song and A. Regan. 2007. Rebate, returns, and price protection policies in supply chain coordination. *IIE Transactions* **39**, 111-124.
15. Lu, X., J.-S. Song and A. Regan. 2006. Inventory planning with forecast updates: approximate solutions and cost error bounds. *Operations Research* **54** (6), 1079-1097.
16. Shang, K. and 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.
17. Lu, X., J.-S. Song and K. Zhu. 2005. On "The censored newsvendor and the optimal acquisition of information". *Operations Research* **53** (6), 1024-1026.
18. Lu, Y., J.-S. Song and D. Yao. 2005. Backorder minimization in multiproduct assemble-to-order systems. *IIE Transactions* **37** (8), 763-774.
19. DeCroix, D., J.-S. Song and P. Zipkin. 2005. A series system with returns: stationary analysis. *Operations Research* **53** (2), 350-362.
20. Lu, Y. and J.-S. Song. 2005. Order-based cost optimization in assemble-to-order systems. *Operations Research* **53** (1), 151-169.
21. Choi, K.-S., J.G. Dai and 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.
22. Drezner, Z., C. Scott and J.-S. Song. 2003. The central warehouse location problem revisited. *IMA Journal of Management Mathematics* **14**, 321-336.

23. Song, J.-S. and P. Zipkin. 2003. Supply chain operations: assemble-to-order systems. Chapter 11, *Handbooks in Operations Research and Management Science*, Vol. **XXX**: *Supply Chain Management*, S. Graves and T. De Kok, eds, North-Holland.
24. Boyaci, T., G. Gallego, K. Shang and J.-S. Song. 2003. Erratum to bounds in “serial production/distribution systems under service constraints”. *Manufacturing & Service Operations Management* **5**, 372-374.
25. Dayanik, S., J.-S. Song and 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.
26. Shang, K. and J.-S. Song. 2003. Newsvendor bounds and heuristic for optimal policies in serial supply chains. *Management Science* **49**, 618-638.
27. Lu, Y., J.-S. Song and D. Yao. 2003. Order fill rate, leadtime variability, and advance demand information in an assemble-to-order system. *Operations Research* **51**, 292-308.
28. Song, J.-S. and D. Yao. 2002. Performance analysis and optimization of assemble-to-order systems with random leadtimes. *Operations Research* **50**, 889-903.
29. Song, J.-S. 2002. Order-based backorders and their implications in multi-item inventory systems. *Management Science* **48**, 499-516.
30. Chen, F. and J.-S. Song. 2001. Optimal policies for multi-echelon inventory problems with Markov-modulated demand. *Operations Research* **49**, 226-234.
31. Song, J.-S., C. Yano and P. Lerssrisuriya. 2000. Contract assembly: dealing with combined supply lead time and demand quantity uncertainty. *Manufacturing & Service Operations Management* **2**, 287-296.
32. Song, J.-S. 2000. A note on assemble-to-order systems with batch ordering. *Management Science* **46**, 739-743.
33. Song, J.-S., S. Xu and B. Liu. 1999. Order-fulfillment performance measures in an assemble-to-order system with stochastic leadtimes, *Operations Research* **47**, 131-149.
34. Song, J.-S. 1998. On the order fill rate in multi-item, base-stock systems, *Operations Research* **46**, 831-845.
35. So, K. and J.-S. Song. 1998. Price, delivery time guarantees and capacity selection, *European Journal of Operations Research* **111**, 28-49.
36. Song, J.-S. and P. Zipkin. 1996. Inventory control with information about supply conditions, *Management Science* **42**, 1409-1419.
37. Song, J.-S. and P. Zipkin. 1996. The joint effect of leadtime variance and lot size in a parallel processing environment, *Management Science* **42**, 1352-1363.

38. Song, J.-S. and 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.
39. Song, J.-S. and P. Zipkin. 1996. Managing inventory with the prospect of obsolescence, *Operations Research* **44**, 215-222.
40. Song, J.-S. 1994. Understanding the leadtime effects in stochastic inventory systems with discounted costs. *Operations Research Letters* **15**, 85-93.
41. Song, J.-S. 1994. The effect of leadtime uncertainty in a simple stochastic inventory model, *Management Science* **40**, 603-613.
42. Song, J.-S. and P. Zipkin. 1993. Inventory control in a fluctuating demand environment. *Operations Research* **41**, 351-370.
43. Song, J.-S. and 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.
44. Song, J.-S. 1988. Continuous-time Markov decision processes with non-uniformly bounded transition rates, *Scientia Sinica (Series A)*, (English Edition) **XXXI**, 1281-1291.
45. Dong, Z. and J.-S. Song. 1988. A secondary approach to the discounted model in semi-Markov decision processes. *Science Bulletin*, (English Edition) **33**, 448-454.
46. Song, J.-S. and Z. Dong. 1987. A note on continuous-time Markov decision processes with undiscounted cost criterion. *Science Bulletin*, (Chinese Edition) **32**, 1201-1205.

Working Papers

1. Song, J.-S. and J. Tong. 2011. Payment schemes, financing costs, and inventory management.
2. Tong, J. and J.-S. Song. 2011. Reference prices and transaction utilities in inventory decisions.
3. Guo, P., B. Niu, J.-S. Song and Y. Wang. 2011. Price negotiation, supply risk, and procurement strategies in a multi-tier supply chain.
4. Ang, M., J.-S. Song, M. Wang and H. Zhang. 2011. On properties of discrete (r,q) inventory systems.
5. Lu, L., J.-S. Song and H. Zhang. 2010. Optimal policies for an assemble-to-order N-system.
6. Liu, F. and J.-S. Song. 2010. Cost-sharing contracts for coordinating semi-centralized global production networks.
7. Song, J.-S. and P. Zipkin. 2008. Newsvendor problems with sequentially revealed demand information.
8. Song, J.-S. and Z. Xue. 2007. Demand management and inventory control for substitutable products.
9. Hu, W., J.-S. Song and H. Zhang. 2007. On “Resource Flexibility with Responsive Pricing”. (Last revised, June 2010)

10. Zheng, X. and J.-S. Song. 2007. e-Fulfillment: vertical vs. horizontal cooperation.
11. Song, J.-S. and P. Zipkin. 2006. Supply streams. (Last revised, October 2011)
12. Lu, X., J.-S. Song and K. Zhu. 2006. Inventory control with unobservable lost sales and Bayesian updates.
13. Singh, M., J.-S. Song, C. Yano and A. Moreno-Beltran. 2004. Production and repair decisions with time-consuming repair and a deadline.

TEACHING ACTIVITIES

Courses taught

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 IT 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

Ph.D. Students

- Kevin H. Shang (2002)
Dissertation: *Simple Solutions to Supply Chain Inventory Management*
Current position: Associate Professor with tenure, Fuqua School of Business, Duke University
- Xiaona Zheng (2005)
Dissertation: *Essays on Multi-Channel Supply Chains*
Current position: Associate Professor, Guanghua School of Management, Peking University
- Zhengliang Xue (2008)
Dissertation: *Integrated Marketing and Operations Strategies: Multiproduct Demand Shaping and Inventory Planning*
Current Position: Research Staff Member, IBM Watson Research Center

- Fang Liu (2011)
Dissertation: *Coordination Mechanism Design for Sustainable Global Supply Networks*
Current Position: Assistant Professor, Nanyang Business School, Nanyang Technological University, Singapore

Postdoctoral Researchers

- Yingdong Lu (1999-2000)
Topic: *Assemble-to-Order Systems with Random Leadtimes*
Current position: Research Staff Member, IBM Watson Research Center
- Xiangwen Lu (2002-2003)
Topic: *Forecasting and Inventory Control*
Current position: Research Staff Member, Cisco Systems

PROFESSIONAL ACTIVITIES

Editorial Positions

- 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
- Associate Editor, *Manufacturing and Service Operations Management*, 2006-2007
- Associate Editor, *Management Science*, 2000-2007
- Associate Editor, *Operations Research*, 1997-2006
- Associate Editor, *Naval Research Logistics*, 2003-2006
- Associate Editor, *IIE Transactions*, 2000-2005
- Editorial board member, *Manufacturing and 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

- President, INFORMS Manufacturing and Service Operations Management Society (MSOM), July 2009-June 2010; President-elect, July 2008-June 2009
- Judge, Best Paper Award, OCEAMSE Conference, Shanghai, 2009, 2010
- Panelist, National Science Foundation, Manufacturing Enterprise Systems program, 2008
- External Examiner, Executive M.Sc. in Logistics and Supply Chain Management, 2007-2010
- External Examiner, Executive M.Sc. in E-Commerce and Logistics Technologies, 2010-present
- 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
- Reviewer, INFORMS-Junior Faculty Interest Group Paper Competition, 2004-2006
- Panelist, National Science Foundation, DMII, 1999, 2001, 2008

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)

Conference activities

- Program Committee, OCESAMSE Conference, Shanghai 2008, 2009, CKGSB 2010, Tianjin 2011
- 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, INFORMS national meetings in New Orleans 1995, Atlanta 1996, San Diego 1997, Seattle 1999, Salt Lake City 2000, San Antonio 2000, Miami Beach 2001, San Jose 2002, Atlanta 2003, Denver 2004, San Francisco 2005, Pittsburgh 2006, Austin 2010, Charlotte 2011

UNIVERSITY SERVICE

At Duke University

- China Faculty Council, 2011-present
- Operations area coordinator, 2006-2011
- Executive committee, 2005-2007
- Ph.D. Operations area coordinator, 2003-2005
- Various ad hoc committees and committee chairs for faculty promotions, 2003-
- Strategic alliances task force, 2004-2005

At 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