

## CURRICULUM VITAE

### **RICK K. C. SO**

The Paul Merage School of Business  
University of California  
Irvine, CA 92697-3125

Tel: (949) 824-5054  
Fax: (949) 725-2845  
E-mail: rso@uci.edu

### **PROFESSIONAL EXPERIENCE**

#### Academic Positions

Full Professor, Paul Merage School of Business, Univ. of California-Irvine (1998-present)

Chair Professor, Department of Management, Hong Kong Polytechnic Univ. (1996-98)

Associate Professor, Graduate School of Management, Univ. of California-Irvine (1992-98)

Assistant Professor, Graduate School of Management, Univ. of California-Irvine (1989-92)

#### Administrative Positions

Associate Dean of Undergraduate Programs, Paul Merage School of Business, Univ. of California-Irvine (2014-16, 2009-12)

Department Head, Department of Management, Hong Kong Polytechnic Univ. (1996-98)

#### Visiting Positions

Visiting Professor, School of Business, Univ. of Hong Kong (2012)

Visiting Professor, School of Business, National Univ. of Singapore (2004-05)

Visiting Professor, Graduate School of International Management, International Univ. of Japan (2001, 2002)

#### Other Relevant Professional Positions

Member of Technical Staff, AT&T Bell Laboratories, Princeton, New Jersey (1985-89)

Research Associate, Electric Power Research Institute, Palo Alto, California (1983-84)

### **EDUCATION**

Ph.D. in Operations Research, Stanford University, USA (1985)

M.S. in Operations Research, Stanford University, USA (1982)

B.S. in Mathematics and Computing & Information Science, Roosevelt University, USA (1981)

## **HONORS AND AWARDS**

- Senior Faculty Research Award, Paul Merage School of Business, UC-Irvine (2016)
- Exceptional Service Award, Merage Undergraduate Student Association, UCI (2016)
- Faculty Service Award, Paul Merage School of Business, UC-Irvine (2011)
- Excellence in MBA Core Teaching, Paul Merage School of Business, UC-Irvine (2009)
- Andersen Consulting Outstanding Faculty Award, Graduate School of Management, UC-Irvine (1991)

## **RESEARCH GRANTS AND FELLOWSHIPS**

- Faculty Research Grant (US\$15,000), National University of Singapore (2005)
- Research Grant (US\$65,000), Hong Kong Research Grant Council (2004)
- Research Grant (US\$54,000), Hong Kong Research Grant Council (1997)
- Research Grant (US\$78,000), Hong Kong Polytechnic University (1996)
- Corporate Partners Faculty Research Grant (\$10,000), GSM, UC-Irvine (1995)
- Faculty Research Fellowship (\$10,000), UC-Irvine (1991)
- Faculty Career Development Grant (\$9,000), UC-Irvine (1990)

## **UNIVERSITY SERVICES**

- Ph.D. Program Director, Graduate School of Management, UCI (1993-94, 1999-00)
- Personnel Committee, Paul Merage School of Business, UCI (1991-92, 1999-2001, 2008-10, 2013-15, Chair: 2000-01, 2009-10, 2014-15)
- Ph.D. Program Committee, Paul Merage School of Business, UCI (1990-96, 1998-2001)
- Master Program Committee, Paul Merage School of Business, UCI (2006-09)
- Undergraduate Program Committee, The Paul Merage School of Business (2001-04, 2007-08, 2012-14, Chair: 2012-13)
- ODT Area Coordinator, Paul Merage School of Business, UCI (2005-08, 2013-14)
- Council of Educational Policy, UCI (2007-10)
- Committee on UG Scholarships, Honors and Financial Aids, UCI (2003-04)
- Council on Planning and Budget, UCI (1998-99)
- Committee on Computer Policy, UCI (1991-94)
- Manufacturing Extension Program Advisory Board, UCI (1993-94)
- Academic Senate - School Representative, UCI (1990-92)
- University Research Committee Evaluation Panel, National Univ. of Singapore (2005)
- Department Promotion & Tenure Committee, National Univ. of Singapore (2005)

## **TEACHING ACTIVITIES**

### Course Taught

- Ph.D. Seminar in Stochastic Models in Operations
- Ph.D. Seminar in Supply Chain Management
- Operations Management (MBA, EMBA)
- Production and Inventory Management (MBA)
- Field Projects in Operations Management (MBA)
- Statistics for Management (MBA, EMBA)
- Process Management and Modeling (MBA)
- Operations - IT Lab. (MBA)
- Supply Chain Management (NUS-Undergraduate)
- Analytics for Managers (NUS-MBA)

### Doctoral Dissertation Supervision

- James Cao – Chair (2012)
- Wenting Pan – Chair (2012)
- Shaoxuan Liu – Chair (2008)
- Yung-Jae Lee – Chair (1998)
- Jiaru Bai – Member (2017)
- Ali Hojjat – Member (2016)
- Tianjun Feng – Member (2008)
- Kevin Shang – Member (2002)
- Albert Lee – Member (1992)

## **RESEARCH INTERESTS**

- Operations Management
- Design and Management of Manufacturing and Service Systems
- Just-In-Time Production Systems
- Time-Based Management
- Supply Chain Management
- Mathematical Modeling and Operations Research

## RESEARCH PUBLICATIONS

1. Manne, A.S., C.R. Nelson, K.C. So and J.P. Weyant, "CPM: A Contingency Planning Model of the International Oil Market," Applications of Management Science, Vol. 4, edited by R.L. Schultz, JAI Press Inc., London, 1-35 (1985).
2. Manne A.S., K.C. So and J. P. Weyant, "OTM: An International Oil Trade Model," Energy Markets in Longer-Term: Planning Under Uncertainty, ed. by A.S. Kydes and D.M. Geraghty, Elsevier Science Publishers B.V., North Holland, 241-244 (1985).
3. So, K.C. and S. C. Pinault, "Allocating Buffer Storages in a Pull System," International Journal of Production Research, **26**, 1959-1980 (1988).
4. So, K.C., "On the Efficiency of Unbalancing a Production Line," International Journal of Production Research, **27**, 717-729 (1989).  
  
So, K.C., "On the Efficiency of Unbalancing a Production Line: A Reply to an Alternate Interpretation," International Journal of Production Research, **28**, 1221-1222 (1990).
5. Federgruen, A. and K.C. So, "Optimal Time To Repair A Broken Server," Advances in Applied Probability, **21**, 376-397 (1989).
6. So, K.C., "Allocating Buffer Storages in a Flexible Manufacturing System," International Journal of Flexible Manufacturing Systems, **1**, 223-237 (1989).
7. Hillier, F.S. and K.C. So, "The Assignment of Extra Servers to Stations in Tandem Queueing Systems with Small or No Buffers," Performance Evaluation, **10**, 219-231 (1989).
8. So, K.C., "Some Heuristics for Scheduling Jobs on Parallel Machines with Setups," Management Science, **36**, 467-475 (1990).
9. Federgruen, A. and K.C. So, "Optimal Maintenance Policies For Single-Server Queueing Systems Subject to Breakdowns," Operations Research, **38**, 330-343 (1990).
10. So, K.C., "The Impact of Buffering Strategies on the Performance of Production Line Systems," International Journal of Production Research, **28**, 2293-2307 (1990).
11. Rajasekera, J.R., M. R. Murr and K.C. So, "A Due-Date Assignment Model for a Flow Shop with Applications in a Lightguide Cable Shop," Journal of Manufacturing Systems, **10**, 1-7 (1991).
12. Hillier, F.S. and K.C. So, "The Effect of the Coefficient of Variation of Operation Times on the Allocation of Storage Space in Production Line Systems," IIE Transaction, **23**, 198-206 (1991).
13. Federgruen, A. and K.C. So, "Optimality of Threshold Policies in Single Server Queueing Systems with Server Vacations," Advances in Applied Probability, **23**, 388-405 (1991).

14. Hillier, F.S. and K.C. So, "The Effect of Machine Breakdowns and Storage Space on the Performance of Production Line Systems," International Journal of Production Research, **29**, 2043-2055 (1991).
15. So, K.C. and K.E. Chin, "Performance Bounds for Multiserver Exponential Tandem Queues with Finite Buffers," European Journal of Operational Research, **63**, 463-477 (1992).
16. So, K.C., "Optimality of Control Limit Policies in Replacement Models," Naval Research Logistics, **39**, 685-697 (1992).
17. Hillier F.S., K.C. So and R.W. Boling "Toward Characterizing the Optimal Allocation of Storage Space in Production Line Systems with Variable Operation Times," Management Science, **39**, 126-133 (1993).
18. Hillier, F.S. and K.C. So, "Some Data for Applying the Bowl Phenomenon to Large Production Line Systems," International Journal of Production Research, **31**, 811-822 (1993).
19. Ladany, S.P. and K.C. So, "Optimal Recycling of Waste Materials in a Plastic Extrusion Production Process," European Journal of Operational Research, **79**, 13-24 (1994).
20. So, K.C. and C.H. Scott, "Optimal Production Sequence for a Product with Matching Components," Operations Research, **42**, 694-708 (1994).
21. Scott, C.H. and K.C. So, "Optimal Allocation of Work Orders in a Multi-Echelon Factory Network," Journal of the Chinese Institute of Industrial Engineers, **11**, 105-110 (1994).
22. So, K.C. and C.S. Tang, "Optimal Operating Policy for a Bottleneck with Random Rework," Management Science, **41**, 620-636 (1995).
23. So, K.C. and C.S. Tang, "Optimal Batch Sizing and Repair Strategies for Operations with Repairable Jobs," Management Science, **41**, 894-908 (1995).
24. Hillier, F.S. and K.C. So, "On the Optimal Design of Tandem Queueing Systems with Finite Buffers," Queueing Systems, **21**, 245-266 (1995).
25. Hillier, F.S. and K.C. So, "On the Simultaneous Optimization of Server and Work Allocations in Production Line Systems with Variable Processing Times," Operations Research, **44**, 435-443 (1996).
26. Hillier, F.S. and K.C. So, "On the Robustness of the Bowl Phenomenon," European Journal of Operational Research, **89**, 496-515 (1996).
27. So, K.C. and C.S. Tang, "Operational Strategies for Managing Congestion in Service Systems," European Journal of Operational Research, **92**, 83-98 (1996).
28. So, K.C., "Optimal Buffer Allocation Strategy for Minimizing Work-In-Process Inventory in Unpaced Production Lines," IIE Transactions, **29(1)**, 81-88 (1997).
29. So, K.C. and J.S. Song, "Price, Delivery Time Guarantees and Capacity Selection," European Journal of Operational Research, **111(1)**, 28-49 (1998).
30. Lee, H.L., K.C. So and C.S. Tang, "The Value of Information Sharing in a Two-Level Supply Chain," Management Science, **46**, 626-643 (2000).

31. So, K.C. and C.S. Tang, "Modeling the Impact of an Outcome Oriented Reimbursement Policy on Clinics, Patients, and Pharmaceutical Firms," Management Science, **46**, 875-892 (2000).
32. So, K.C. "Price and Time Competition for Service Delivery," Manufacturing and Services Operations Management, **2(4)**, 392-409 (2000).
33. So, K.C., C.S. Tang, and R. Zavala, "Models for Improving Team Productivity at the Federal Reserve Bank," Interfaces, **33(2)**, 25-36 (2003).
34. So, K.C. and X. Zheng, "Impact of Supplier's Lead Time and Forecast Demand Updating on Retailer's Order Quantity Variability in a Two-Level Supply Chain," International Journal of Production Economics, **86**, 169-179 (2003).
35. Hsu, V.N., C.Y. Lee and K.C. So, "Optimal Component Stocking Policy for Assemble-To-Order Systems with Leadtime-Dependent Component and Product Pricing," Management Science, **52**, 337-351 (2006).
36. Byers, R. and K.C. So, "A Mathematical Model for Evaluating Cross-sales Policies in Telephone Service Centers." Manufacturing and Service Operations Management, **9**, 1-8 (2007).
37. Takezawa, N., J.R. Rajasekera and K.C. So, "Risk Hedging Through Forward Supply Contract and Equity Ownership in a Spin-Off Decision." International Journal of Production Economics, **106**, 532-543 (2007).
38. Hsu, V.N., C.Y. Lee and K.C. So, "Managing Component for Assemble-To-Order Products with Leadtime-Dependent Pricing: The Full-Shipment Model." Naval Research Logistics, **54**, 510-523 (2007).
39. Fang, X., K.C. So and Y. Wang, "Component Procurement Strategies in Decentralized Assemble-to-Order Systems with Leadtime-Dependent Product Pricing." Management Science, **54**, 1997-2011 (2008).
40. Liu, S., K.C. So and F. Zhang, "The Effect of Supply Reliability in a Retail Setting with Joint Marketing and Inventory Decisions." Manufacturing and Service Operations Management, **12(1)**, 19-32 (2010).
41. Pan, W. and K.C. So, "Optimal Product Pricing and Component Production Quantities for an Assembly System Under Supply Uncertainty." Operations Research, **58**, 1792-1797 (2010).
42. Cao, J., K.C. So and S. Yin, "Impact of an Online-to-Store Channel on Demand Allocation, Pricing and Profitability." European Journal of Operational Research, **248**, 234-245 (2016).
43. Pan, W and K.C. So, "Component Procurement Strategies in Decentralized Assembly Systems under Supply Uncertainty." IIE Transactions, **48**, 267-282 (2016).
44. Bai, J, K.C. So and C.S. Tang, "A Queueing Model Arising from Managing Small Projects under Uncertainties," European Journal of Operational Research, **253**, 777-790 (2016).

45. Huynh, C., K.C. So and H. Gurnani, "Managing a Closed-Loop Supply System with Random Returns and a Cyclic Delivery Schedule," European Journal of Operational Research, **255**, 787-796 (2016).
46. Cao, J. and K.C. So, "The Value of Demand Forecast Updates in Managing Component Procurements for Assembly Systems." IIE Transactions, **48**, 1198-1216 (2016).
47. K.C. So and E. Wu, "Developing Cost-Effective Inspection Sampling Plans for Energy Efficiency Programs at Southern California Edison," Interfaces, **46**, 522-532 (2016).

## **RESEARCH WORK IN PROGRESS**

- Coordinating Supply and Demand for an On-demand Service Platform with Impatient Customers. (Joint work with J. Bai, C. S. Tang, X.Chen, H. Wang) Working paper under review.
- Impact of a Pickup Depot for an Online Retailer with Impatient Customers. (Joint work with James Cao) Working paper under review.
- Optimal Sourcing Strategies for an Assembly System Under Supply Uncertainty. Working paper in progress.

## **PROFESSIONAL ACTIVITIES**

### Professional Affiliations

- Member, The Institute for Operations Research and Management Science (INFORMS)
- Member, Production and Operations Management Society (POMS)

### Professional Services

*Senior Editor*, Production and Operations Management (2004 – present)

*Associate Editor*, Naval Research Logistics (2000 – present)

*Editorial Board Member*, Computers and Operations Research (2015 – present)

*Associate Editor*, IIE Transactions (1993-97)

*Research Panel Member*, Hong Kong Research Grant Council (1996-2001)

*Chair*, George Dantzig Dissertation Award Committee (1995)

*External Examiner* for a number of academic departments in universities

*Ad hoc reviewer* for numerous academic journals, book publishers, and grant agencies