

S. VISWANATHAN

CV HIGHLIGHTS

Dr. S. Viswanathan (Vish) is Professor of Operations Management and Head of the Division of Information Technology & Operations Management (ITOM) at the Nanyang Business School, Nanyang Technological University, Singapore. He obtained a Ph.D. in Operations Research with minor in Operations Management from Case Western Reserve University in 1992, MBA from Indian Institute of Management Calcutta in 1986, and B.Tech (Mechanical Engineering) from Indian Institute of Technology Madras in 1984. His teaching interests are in the general areas of Operations Management, Business Process Analysis, and Supply Chain & Logistics Management. His research interests are in Inventory Management, Joint Replenishment Inventory Systems, Manufacturing Management, Supply Chain Coordination, Reverse Logistics Models, and Forecasting. He has been actively involved as a consultant to organizations in Singapore. His consulting work involves providing expertise in Logistics, Inventory Management, Supply chain Management, Work Force Scheduling and Forecasting. His research has been published in such journals as *Management Science*, *Operations Research*, *Naval Research Logistics*, *IIE Transactions*, *International Journal of Production Research*, *Operations Research Letters*, *Journal of the Operational Research Society*, *European Journal of Operational Research*, *International Journal of Production Economics*, *Integrated Manufacturing Systems*, *International Journal of Technology and Management*, *International Journal of Logistics*, and *International Journal of Physical Distribution & Logistics Management*. He also serves on the editorial board of several top journals in the field.

CONTACT ADDRESS

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Tel: +65-6790-4798(Work).

Fax: +65-6792-2313(Work), email: vish@pmail.ntu.edu.sg

PERSONAL PARTICULARS

- Date of Birth: June 17, 1962.
- Nationality: Singapore (By registration).
- Marital status: Married, 2 children.

EDUCATION

CASE WESTERN RESERVE UNIVERSITY, CLEVELAND, OHIO, U.S.A

Ph.D., September, 1992, Operations Research, Minor in Operations Management.

Ph.D. Dissertation: Integrated Inventory & Transportation Policies.

MS in Management Science, January 1990.

INDIAN INSTITUTE OF MANAGEMENT, CALCUTTA, INDIA.

MBA, May 1986.

Gold Medallist and First Rank Holder.

Won several prizes including the Chairman's Prize, John Wyne Prize, Calcutta Management Association Prize, Dr. BC Roy Gold Medal, Dr. K. Nath Public Trust Gold Medal and BP Poddar Merit Scholarship

INDIAN INSTITUTE OF TECHNOLOGY, MADRAS, INDIA.

B.Tech (Mechanical Engineering), May 1984.

(All-India, Joint Entrance Exam Rank of 222 out of over 250,000 applicants in 1979).

TEACHING INTERESTS

- Operations Management.
- Business Process Analysis.
- Supply Chain & Logistics Management.
- Management Science.

RESEARCH INTERESTS

- Joint Replenishment Inventory Systems.
- Inventory Management.
- Manufacturing Systems.
- Supply Chain & Distribution Channel Coordination.
- Reverse Logistics Models.
- Forecasting.

WORK EXPERIENCE

NANYANG BUSINESS SCHOOL, NANYANG TECHNOLOGICAL UNIVERSITY, SINGAPORE.

- *Professor* (with Tenure), From Feb 2008.
- *Associate Professor* (with Tenure), Aug 1999 - Jan 2008.
- *Associate Professor*, Jan 1999 - Jul 1999.
- *Lecturer*, Oct 1992 - Dec 1998.

SOUTHERN METHODIST UNIVERSITY, DALLAS, TEXAS, USA

- *Visiting Professor*, Edwin L. Cox School of Business, Sep 1997 - Aug 1998.

CASE WESTERN RESERVE UNIVERSITY, CLEVELAND, OHIO, USA

- *Software Specialist, IT Support Group* (Part-time), Jan 1991 - Sep 1992.

BP OIL COMPANY, CLEVELAND, OHIO, USA

- *Research Associate, Information Systems* (Part-time), May 1989 - Dec 1990.

TUBE INVESTMENTS OF INDIA LTD., MADRAS, INDIA.

- *Internal Auditor*, Dec 1986 - Sep 1988.

SUNDARAM CLAYTON LTD., MADRAS, INDIA.

- *Management Trainee (Purchasing)*, May 1986 - Dec 1986.

TEACHING

COURSES TAUGHT

- EM6622 Managing SME Operations (EMBA)
- B6016 Managing Business Operations (MBA Core)
- B6080 Supply Chain & Logistics Management (MBA Elective)
- OM9101 Optimization (PhD Program)
- OM9201 Contemporary Issues in Operations Management (PhD Program)
- BT204 Service Operations Management (UG Elective)
- BC211 Managing Operations in Services and Manufacturing (UG Core)
- BM333 Logistics Management (UG Elective)
- B6641 Data Modeling & Operations Management (MBA-TOM, Core)
- B6009 Decision Science (MBA Core)
- AC108 Management Science (UG Core)
- BM206 Quantitative Methods (UG Core)
- MIS6386 Supply Chain & Logistics Mgmt. (MBA Elective, at SMU, Dallas, Tx)
- MIS6302 Managing Operations in Mfg. & Svcs (MBA core, at SMU, Dallas, Tx)
- MIS2306 Operations Management (UG Core, at SMU Dallas, Tx)

TEACHING ACHIEVEMENTS

- Average teaching evaluation score of 4.37 on a 5 point scale for last 5 years. Overall average teaching evaluation since 1992 of 4.24.
- Winner of Teacher of the Division award, 2003.
- Nominated for Teacher of the School, 2003.
- Nominated for Teacher of Division, 2002, 2004, 2005, and 2006.
- Was responsible for launching and stabilizing the MBA OM core, EMBA course “Managing SME Operations”, UG OM Core for IT Majors, UG Service Operations Course for Hospitality and Tourism Majors, and the MBA SCM elective and UG Logistics Management elective courses at Nanyang Business School.

EXECUTIVE TEACHING

- Executive programs on topics related to Supply Chain Management, Business Process Analysis, Operations Management and Logistics to Berkeley-Nanyang Advanced Management Program, Nanyang Executive MBA Program, Nanyang Executive Open Program, Logistics Practitioners Development Program (For Chartered Institute of Transport), Essilor International, Panasonic, Singapore Petroleum Company, RGM International, TNT Logistics, IBM, Matsushita, NTU-Erasmus SCM Program, Ministry of Foreign Affairs (Government Officers from developing countries) IMARC and other companies.

CONSULTING/EXECUTIVE PROGRAMMES

- Essilor International (2007, 2008, 2009)
- National Panasonic (2007, 2008)
- Singapore Petroleum Company (2008)
- RGM International (2007)
- Chartered Institute of Transport (2000 to 2009)
- NTUC FairPrice Supermarkets (2004, 2005)
- RTA Global (2003, 2004)
- TNT Logistics (2003)
- Matsushita Electric (2002)
- Ministry of Foreign Affairs (2002)
- Singapore Airlines Engineering Company (1999)
- IBM/Chartered Institute of Transport, Singapore (1997)
- Rothmans International, Singapore (1996)
- Singapore International Chamber of Commerce (1995)
- Cleveland Clinic Foundation, Cleveland, Ohio, U.S.A. (1989)
- Ohio Bell, Cleveland, Ohio, U.S.A. (1989)

PUBLICATIONS

- Total citations: 600
- H-index: 14.

JOURNAL ARTICLES

Joint Replenishment and Multi-Item Inventory Systems

1. S. Viswanathan, (2007), "An Algorithm for determining the best lower bound for the Stochastic Joint Replenishment Problem," *Operations Research*, 55, 992-996.
2. S. Viswanathan, (2002), "On Optimal Algorithms For The Joint Replenishment Problem," *Journal of the Operational Research Society*, 53, 1286-1290.
3. S. Viswanathan, (1998), "Optimal Strategy for the Integrated Vendor-Buyer Inventory Model," *European Journal of Operational Research*, 105, 38-42.
4. S. Viswanathan, (1997), "Periodic Review (s, S) Policies for Joint Replenishment Inventory Systems", *Management Science*, 43, 1447-1454.
5. S. Viswanathan and K. Mathur, (1997), "Integrating Routing and Inventory Decisions in One Warehouse Multi-Retailer Multi-Product Distribution Systems", *Management Science*, 43, 294-312.
6. S. Viswanathan, (1996), "A new optimal algorithm for the Joint Replenishment Problem", *Journal of the Operational Research Society*, 47, 936-944.
7. S. Viswanathan and Rohit Bhatnagar, (1995), "An Alternative Approach for Modelling Multi-Item Inventory Problems", *Malaysian Journal of Management Science*, 4, December 1995.
8. S. Viswanathan, (1993), "Optimal Policies for the Capacitated Two-Stage Multi-Item Inventory Model with Joint Setup Costs", *Operations Research Letters*, 14, 43-48.

Supply Chain and Logistics Management

9. R. Bhatnagar and S. Viswanathan, (2007), "Analysis of Warehouse Location Decisions in Urban Distribution Systems," Accepted and Forthcoming in *Technology, Operations and Management*.
10. S. Viswanathan and R. Bhatnagar, (2005), "The application of ABC Analysis in Logistics and Production: An explanation for the apparent Contradiction," *International Journal of Services and Operations Management*, 1, 257-267.
11. U. M. Apte, and S. Viswanathan, (2002), "Strategic and Technological Innovations in Supply Chain Management," *International Journal of Manufacturing Technology and Management*, 4, 264-282.
12. U. M. Apte, and S. Viswanathan, (2000), "Effective Cross Docking For Improving Distribution Efficiencies," *International Journal of Logistics: Research and Applications*, 3, 291-302.
13. R. Bhatnagar and S. Viswanathan, (2000), "Reengineering Global Supply Chains: Alliances between Manufacturing Firms and Global Logistics

Services Providers," *International Journal of Physical Distribution and Logistics Management*, 30, 13-34.

Distribution Channel/Supply Chain Coordination

14. S. Viswanathan, (2008), "Coordination in Vendor-Buyer Inventory Systems: On Price Discounts, Stackelberg Game and Joint Optimization," Accepted and forthcoming in *International Journal of Operational Research*.
15. Yan Feng and S. Viswanathan, (2007), "Impact of Demand Uncertainty on Coordinating Supply Chain Inventories Through Common Replenishment Epochs," *Journal of Operational Research Society*, 58, 964-971.
16. S. Viswanathan, H. Widiarta, R. Piplani, (2007), "Value of Information and Synchronization in a Multi-Tier Supply Chain," *International Journal of Production Research*, 45, 5057-5074.
17. A Mishra and S. Viswanathan, (2007), "Coordination Mechanisms for Supply Chains with Finite Production Rate," *Under Revised and Resubmit*.
18. R. Piplani and S. Viswanathan, (2004), "Supply Chain Inventory Coordination through Multiple Common Replenishment Epochs and Selective Discount" *International Journal of Logistics: Research and Applications*, 7, 109-118.
19. S. Viswanathan and Q. Wang, (2003), "Discount Pricing Decisions in Distribution Channels with Price-Sensitive Demand," *European Journal of Operational Research*, 149, 571-587.
20. R. Piplani and S. Viswanathan, (2003), "A Model For Evaluating Supplier Owned Inventory Strategy," *International Journal of Production Economics*, 81-82, 565-571.
21. W.K. Ng, R. Piplani, S. Viswanathan, (2003), "Development of a Simulation Workbench for Analysing Information Flow in Multi-echelon Supply Chains," *Integrated Manufacturing Systems*, 14, 449-457.
22. S. Viswanathan and R. Piplani, (2001), "Coordinating Supply Chain Inventories Through Common Replenishment Epochs," *European Journal of Operational Research*, 129, 277-286. [This was among the top 4 requested papers on the EJOR website in 2001]

Manufacturing/Economic Lot Scheduling

23. M. M. Srinivasan and S. Viswanathan (2008), "Optimal WIP Inventory Levels for High-Variety Low-Volume Manufacturing Systems," Accepted and forthcoming, *IIE Transactions*.
24. S.K. Goyal and S. Viswanathan, (2006), "On Optimal production policy with shelf life including shortages," *Journal of the Operational Research Society*, 57, 747-754.
25. S. Viswanathan and S.K. Goyal, (2003), "Corrigendum: Optimal Cycle Time and Production Rate in a Family Production Context with Shelf Life Considerations," *International Journal of Production Research*, 41, 3389.
26. S. Viswanathan and S.K. Goyal, (2002), "On Manufacturing Batch Size and Ordering Policy for Products with Shelf Lives", *International Journal of Production Research*, 40, 1965-1970.

27. S. Viswanathan and S.K. Goyal, (2000), "Incorporating planned backorders in a family production context with shelf life considerations," *International Journal of Production Research*, 38, 829-836.
28. S. Viswanathan, and S.K. Goyal, (1997), "Optimal Cycle Time and Production Rate in a Family Production Context with Shelf Life Considerations", *International Journal of Production Research*, 35, 1703-1711.
29. S. Viswanathan, (1995), "A note on Effect of production cost on shelf life", *International Journal of Production Research*, 33, 3485-3486.
30. S. Viswanathan, (1996), "A New Approach for Solving the P-Median Problem in Group Technology", *International Journal of Production Research*, 34, 2691-2700.
31. S. Viswanathan, (1995), "Configuring Cellular Manufacturing Systems: A Quadratic Integer Programming Formulation and a Simple Interchange Heuristic", *International Journal of Production Research*, 33, 361-376.
32. S. Viswanathan, (1993), "Algorithms for configuring GT cells", *Malaysian Journal of Management Science*, 2, 72-83.

Forecasting

33. H. Widiarta, S. Viswanathan, and R. Piplani, (2007), "On the Effectiveness of Top-Down Approach for Forecasting Autoregressive Demands," *Naval Research Logistics*, 54, 176-188.
34. H. Widiarta, S. Viswanathan and R. Piplani, (2008), "Evaluation of Hierarchical Forecasting for Substitutable Products," *International Journal of Services and Operations Management*, 4, 277-295.
35. H. Widiarta, S. Viswanathan, and R. Piplani, (2008), "Forecasting Item-Level Demands: An Analytical Evaluation of Top-Down versus Bottom-Up Forecasting in a Production Planning Framework," *IMA Journal of Management Mathematics*, 19, 207-218.
36. S. Viswanathan, H. Widiarta, and R. Piplani, (2008), "Forecasting aggregate time series with lumpy subaggregate components: Top-down versus bottom-up Forecasting," *IMA Journal of Management Mathematics*, 19, 275-287.
37. H. Widiarta, S. Viswanathan and R. Piplani, (2009), "Forecasting Aggregate Demand: An Analytical Evaluation of Top-Down versus Bottom-Up Forecasting in a Production Planning Framework," *International Journal of Production Economics*, 118, 87-94.

Non-Refereed Articles

38. S. Viswanathan, (2002), "Effective e-Procurement: Exploiting the Full Potential of a Coordinated Supply Chain," *Making IT Happen*, Vol. 4, No.2, 1-3.
39. S. Viswanathan, (1994), "Keeping Updated on the Latest Developments in Operations Research through the INTERNET", *Newsletter of the OR Society of Singapore*, May, 1994, 5-6, Singapore (1994)

BOOK CHAPTERS AND CASE STUDIES

40. U. Apte, and S. Viswanathan, (2007), "A Proactive Demand Management Model for Controlling e-Retailer Inventory," *To appear in "Managing in the Information Economy: Current Research Issues*, Edited by U. Karmarkar and U. Apte, Springer, ISBN: 978-0-387-34214-6.
41. D.G. Allampalli and S. Viswanathan, (2002), "Komala's Restaurant of Singapore," Case Study on Service Operations Management/Process Analysis, *AsiaCase.Com*.
42. S. Viswanathan, (1996), "Operational Auditing" in *Issues and Developments in Auditing*, Singapore Business Development Series, Addison Wesley.
43. S. Viswanathan, Cheryl Tay, Venson Shaw, (1995), "Productivity through Strategy: The Case of NTUC Fairprice", in NPB Casebook on Productivity Successes of Singapore Companies, published by National Productivity Council.

WORKING PAPERS

44. S. Viswanathan and Yinghang Chen, (2007), "The Joint Replenishment Problem with Capacity Constraint on the major setup," Working paper, *Submitted*.
45. S. Viswanathan and U. Apte, (2005), "An Inventory model with multiple levels of proactive demand for e-retailing," Working paper to be *Submitted*.

CONFERENCE PROCEEDINGS AND PRESENTATIONS

46. Chenxi Zhou and S. Viswanathan, (2008), "A New Bootstrapping Based Method for Forecasting and Safety Stock Determination for Managing Service Parts Inventory," Presented at *15th International Symposium on Inventories*, Budapest, Hungary.
47. Yan Feng and S. Viswanathan, (2008), "A New Lotsizing Heuristic for Manufacturing Systems with Product Recovery," Presented at *15th International Symposium on Inventories*, Budapest, Hungary.
48. S. Viswanathan and M. M. Srinivasan, (2008), "Optimal WIP Inventory Levels for High-Variety Low-Volume Manufacturing Systems," Presented at *Operations Research and Management Science Symposium*, NUS Business School, SINGAPORE.
49. H. Widiarta, S. Viswanathan and R. Piplani, (2006), "Forecasting Aggregate Demand: An Analytical Evaluation of Top-Down versus Bottom-Up Forecasting in a Production Planning Framework," presented at *14th International Symposium on Inventories*, Budapest, Hungary.
50. Yan Feng and S. Viswanathan, (2006), "The impact of demand uncertainty on coordinating supply chain inventories," APORS Conference, January, 2006.
51. S. Viswanathan and Ying Hang Chen, (2006), "The Joint replenishment problem with capacity constraint," APORS Conference, January, 2006.
52. S. Viswanathan, and Yan Feng, (2005), "Forecasting of service arrivals in a repair center," IEEE Conference on Automation Science and Engineering, August, 2005, Edmonton, Canada.

53. S. Viswanathan, Handik Widiarta, R. Piplani, (2004), "Forecasting aggregate time series with lumpy subaggregate components," POMS Annual Conference, 2004, Cancun, Mexico
54. Handik Widiarta, S. Viswanathan, R. Piplani, (2003), "On the effectiveness of top-down versus bottom-up forecasting: The case of lumpy subaggregate time series," *8th Annual International Conference on Industrial Engineering Theory, Applications and Practice*, Las Vegas, Nevada, USA.
55. R. Piplani, and S. Viswanathan, (2003), "Supply chain inventory coordination through multiple, common replenishment epochs and selective discounts," *6th International Conference of the Asia-Pacific Operational Research Society (APORS)*, New Delhi, India. Won the best paper award.
56. D.G. Allampalli and S. Viswanathan, (2003), "Komala's Restaurant of Singapore," *6th Annual Convention, Strategic Management Forum, India*, Jamshedpur, April.
57. Woon Kian Ng, R. Piplani and S. Viswanathan, (2002), "Information Exchange Mechanisms for a 4-Echelon Supply Chain," *30th International Conference on Computers & Industrial Engineering*, Tinos Island, Greece.
58. S. Viswanathan, (2002), "Inventory Coordination in Supply Chains: On Price Discounts and Joint Optimization under Stackelberg Game Framework," presented at *12th International Symposium on Inventories*, Budapest, Hungary.
59. U. Apte, and S. Viswanathan, (2002), "Managing Inventory for e-Commerce Retailers Through Proactive Demand Management," presented at POMS Annual Conference, 2002, San Francisco.
60. D. Ng, R. Piplani, S. Viswanathan, (2002), "A Simulation Based Study of Information Exchange Mechanisms for Multi-Echelon Supply Chain," presented at POMS Annual Conference, 2002, San Francisco.
61. S. Viswanathan, and R. Piplani, (2001), "Supplier Buyer Inventory Systems with Supplier Owned Inventory," presented at *INFORMS Annual Conference*, Miami Beach.
62. R. Piplani and S. Viswanathan, (2000), "A Model For Evaluating Supplier Owned Inventory Strategy," presented at *11th International Symposium on Inventories*, Budapest, Hungary.
63. S. Viswanathan, (2000), "Coordination in Supply Chains: On Price Discounts, Stackelberg Game and Joint Optimization," presented at *INFORMS Multi-Echelon Inventory Conference*, Ann Arbor, Michigan, USA.
64. S. Viswanathan and Q. Wang, (1999), "Discount Pricing Decisions in Distribution Channels," presented at *INFORMS Conference*, Philadelphia, USA.
65. S. Viswanathan, (1999), "Joint Replenishment Inventory Models: A Review of Applications and Algorithms", Presented at *The Fourth Summer School on Inventory Modelling*, Exeter, U.K. organised by International Society for Inventory Research
66. S. Viswanathan, (1997), "Analysis of Warehouse Re-location Decision in an Urban FMCG Distribution System", *APORS'97*, December 1997, Melbourne, Australia.

67. S. Viswanathan and S.K. Goyal, (1997), "Algorithms for the Joint Replenishment Problem: A Survey", *APORS'97*, December 1997, Melbourne, Australia.
68. S. Viswanathan, (1997), "An algorithm for determining the Optimal $Q(s, S)$ Policy for Joint Replenishment Inventory Systems", *Presented at INFORMS National Conference*, May 1997, San Diego.
69. S. Viswanathan, (1995), "One Warehouse Multi-Retailer DR Systems with Vehicle Routing Costs: A Computational Comparison of Two Classes of Policies", *Presented at the INFORMS International Conference*, June 1995, Singapore.
70. S. Viswanathan and Rohit Bhatnagar, (1995), "An Alternative Approach for Modelling Multi-Item Inventory Problems", *Proceedings of the National Conference on Management Sciences*, Kuala Lumpur, October 1995.
71. S. Viswanathan, (1994), "A New Measure of Similarity Coefficient for Solving the P-Median Problem in Group Technology", in *Development in Diversity and Harmony: Proceedings of APORS'94*, editors M Fushimi and K. Tone, Chapter 6, 423-431, World Scientific Publishing Co.
72. S. Viswanathan, (1994), "The Joint Replenishment Problem with Ordering Restrictions", in *Development in Diversity and Harmony: Proceedings of APORS'94*, editors M Fushimi and K. Tone, Chapter 9, 593-601, World Scientific Publishing Co.
73. S. Viswanathan, (1994), "A Hierarchical Approach to Solving Facility Layout Problems", in *Development in Diversity and Harmony: Proceedings of APORS'94*, editors M Fushimi and K. Tone, Chapter 7, 531-538, World Scientific Publishing Co.
74. S. Viswanathan, (1993), "Solving the Cell-Configuration Problem in Group Technology as a Linear-Integer Program", *Proceedings of the Second International Conference on Computer Integrated Manufacturing*, Vol. 2, pg. 396-406, September 1993, Singapore.
75. S. Viswanathan, and K. Mathur, (1992), "An $O(n^2)$ Heuristic for the Joint Replenishment Problem With General Setup Costs", *Presented at the 33rd TIMS/ORSA Joint National Conference*, April 1992, Orlando, Florida, USA.

DISSERTATIONS/PROJECTS SUPERVISED

- Yan Feng, PhD, 2009, "Inventory Models for Reverse Logistics,".
- Yinghang Chen, PhD, 2009, "Capacitated Multi-item Inventory and Bin-packing Problems,"
- Haodong Zhang, MBus, 2007, "Effectiveness of Business Volume Discount as Coordination mechanism in the Supply Chain,"
- Handik Widiarta, PhD, 2004, "Analytical Evaluation of Top-Down and Bottom-up Forecasting Strategies in a Production Planning Environment,"
- David Ng, Masters, 2001, "Information Exchange Mechanisms for 4 Echelon Supply Chain,".
- Murtaza Attarwala, MBA, 2001, "Feasibility of Implementing CFPR for Asian Division of a Chemical Company,".

- Jagdish Singh, T. H. Ong, and W. S. Ling, MBA, 2001, "The design and implementation of a Lean Manufacturing System at an Aerospace Repair and Overhaul Facility,".
- Huang Yunbo, MBus, 1999, "Impact of Plant Practices on Operational Performance,"
- Hia Swee Chay, MBA, 1994, "An Optimization Model for Manufacturing Outsourcing with Special Application to Semiconductor Assembly,".

RESEARCH GRANTS

- Optimization of Service Networks for Reverse Logistics, \$632,406, [Co-investigator], AStar, Strategic Research Theme Grant, 2006.
- Invited as collaborator for a research project on forecasting by leading researchers in UK. Project funded by Engineering & Physical Sciences Research Council (EPSRC, UK)
- Integrated Manufacturing and Service Systems. \$38,000, [Co-investigator], Astar, Strategic Research Theme Pilot Grant, 2004.
- Mathematical Programming Approach to Multi-item Lot Sizing and Scheduling Problems, \$4990, Nanyang Technological University Applied Research Fund Grant, 2005.
- Coordination Issues in Supply Chain Management. \$4,900, Nanyang Technological University Applied Research Fund Grant, 2001.
- Global Supply Chains: Benchmarking Singapore's Competitiveness. (with Dr. Shi Yuwei and Dr. R. Bhatnagar.): \$50,000, Nanyang Technological University Applied Research Fund Grant, 1995.
- Studies in Multi-Stage and Multi-Item Production and Inventory Systems. \$5,000, Nanyang Technological University Applied Research Fund Grant, 1993.

PROFESSIONAL SERVICE

- Editorial Board Member, *International Journal of Production Research*, 2009-2012.
- Editorial Review Board, *Production and Operations Management*, From 2002- .
- Associate Editor, *IEEE Transactions on Automation Science and Engineering*, 2005-2008.
- Associate Editor, *Asia Pacific Journal of Operational Research*, From 2005.
- Special Issues Editor, *Asia Pacific Journal of Operational Research*, From 2008.
- Editorial Board Member, *International Journal of Services and Operations Management*, From 2004-
- External Reviewer, Tenure & Promotion Case for several business schools such as SUNY (State University of New York) and IIM Bangalore.
- Member, Executive Committee, International Society for Inventory Research, 2002-2004.

- External Assessor, Research Grants Council of Hong Kong, 2002, 2003.
- Reviewer: Logistics Management, Operations, Manufacturing Management and General Business Textbooks for Prentice Hall, McGraw Hill and World Scientific.
- Reviewer for following Journals:
Management Science, Operations Research, MSOM, Transportation Science, Decision Sciences, International Journal of Production Research, IIE Transactions, IEEE Transactions on Automation Science and Engineering, European Journal of Operational Research, Production and Operations Management, International Journal of Production Economics, Omega, International Journal of Management Science, Annals of Operations Research, INFOR, Computers and Industrial Engineering, Computers and Operations Research, Asia Pacific Journal of Operational Research, International Journal of Operational Research, IEEE Transactions on Systems, Man and Cybernetics, IMA Journal of Management Mathematics, International Journal of Logistics: Research & Applications, International Journal of Computer Integrated Manufacturing, OR Spektrum, OPSEARCH, Optimal Control Applications and Methods, Transportation Research.
- Member, International Scientific Committee, Global Business Innovation and Development Conference, Rio de Janeiro, Brazil, 2008.
- Member, Organizing Committee, International Conference on Logistics 2001, Organised by NTU and Carnegie Mellon University.
- Member, Conference Program Committee, Global Business Institute, 2002-2008.
- Member of Management Committee, OR Society of Singapore 1993-1995.

UNIVERSITY SERVICE

- Head, Division of IT & Operations Management (ITOM), From 07/2008.
- Member, Research Advisory Committee, NTU, 2008-2009.
- Member, Provost-Dean Group Research Drivers Committee, NTU, 2008.
- Member, Nanyang Awards Committee (2008).
- Member, PhD & Research Committee, Nanyang Business School, 2008-2009.
- Director, PhD Program in Business, 07/2001 to 06/2005.
- Associate Director (Academic), Nanyang MBA Program, 2007-2009.
- Programme Director, MBA (Technology & Operations), 03/2001 to 06/2007.
- Chairman, School IT Steering Committee, 11/2000 - 10/2001.
- Chairman, School Equipment Committee & IT Support Group, 09/1998-10/2000.
Responsible for overseeing school computing facilities comprising 1000 networked computers and 20 technical and managerial staff.
- Chairman, ITOM Faculty Search Committee, From 01/2008.

- Member, Marketing Faculty Search Committee, From 01/2008.
- Deputy Chairman, School Equipment Committee, 1994-1998.
- Member, Division Faculty Recruitment Committee, 2005-2006.
- Member, Division Tenure and Promotion Committee, 2005-2006.
- Member, School Productivity Committee, 1999.
- Member, Logistics Committee, MIT-NTU Conference, 1995.
- Member, School Equipment Committee, 1993-1994.

AWARDS AND HONORS

- Gold Medallist and Institute honor list, 1986, IIM Calcutta.
- B.P. Poddar Merit Scholar, 1985, IIM Calcutta.
- Won several prizes at IIM Calcutta including the Chairman's Prize, John Wyne Prize, Calcutta Management Association Prize, Dr. BC Roy Gold Medal, Dr. K. Nath Public Trust Gold Medal and BP Poddar Merit Scholarship.
- Teacher of the ITOM Division, Nanyang Business School, 2003.
- Nominated for Teacher of the School, Nanyang Business School, 2003.
- Nominated for Teacher of ITOM Division, Nanyang Business School, 2002, 2004, 2005, and 2006.
- Who's who in the world, 1998 - 2000.
- Who's who is Asia, 2006.
- Who's who in Finance and Industry, 2002-
- Who's who in Science and Engineering, 2001, 2002, 2003.

COMPUTER SKILLS

- Good working knowledge of UNIX, Windows, NT and Shell scripts.
- Strong expertise in C, FORTRAN, Pascal.
- Expertise and experience in trouble shooting software problems.
- Experienced in developing codes for algorithms and heuristics for optimization problems in Logistics and Operations Management.

REFERENCES

- Will be provided upon request

May 12, 2009