

**CURRICULUM VITAE**  
**CHELLIAH SRISKANDARAJAH**  
**February 2012**

**I. ACADEMIC HISTORY**

**PERSONAL DATA**

Status : Ashbel Smith Professor of Operations Management  
University of Texas at Dallas

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University of Texas at Dallas  
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Marital status: Married, Two children

Nationality: US Citizen (origin SriLanka)

**EDUCATION**

**University of Toronto, Faculty of Management, Canada (1986-1987).**

- **Post Doctoral Fellow.**
- Supervisor : Professor Suresh P. Sethi.

**Higher National School of Electrical Engineering, National Polytechnic Institute of Grenoble, France (1982-1986).** (Ecole Nationale Supérieure d'Ingénieurs Electriciens, Laboratoire d'Automatique, Institut National Polytechnique de Grenoble, France).

- **Ph.D** (Title in French: Diplome de Docteur). Field: Automation, Operations Research.
- Received this degree with **DISTINCTION** grade (grade in French "TRES HONORABLE").
- Dissertation : L'Ordonnancement dans les ateliers : complexite et algorithmes heuristiques (Shop scheduling : complexity and heuristic algorithms).
- Adviser : Professor Pierre Ladet.

**Université Scientifique et Médicale de Grenoble, France (1982-1983).**  
(Laboratoire d'Informatique et de Mathématiques appliquées de Grenoble).

- **M.Sc. degree** (Title in French: DEA). Field: Operations Research.

**Asian Institute of Technology (A.I.T.) Bangkok, Thailand (1979-1981)**

- **Master of Engineering Degree** in Industrial Engineering and Management. Received this degree with an overall grade point average of 3.83 out of 4.
- Thesis : Production scheduling model for a sanitaryware manufacturing company.
- Adviser : Professor Pakorn Adulbhan.

**University of Sri Lanka, Katubedda Campus, Sri Lanka (1973-1977)**

- **B.Sc. Engineering Degree** (graduated with Honors) in Mechanical Engineering.

## **AWARDS AND HONORS**

- Finalist, Daniel H. Wagner Prize for Excellence in Operations Research Practice (INFORMS), 2010. Research paper: Chung, C., Dawande, M., Rajamani, D. and Sriskandarajah, C., "A Short Range Scheduling Model for Blockbuster's Order Processing Operation," *Interfaces*, 2011, to appear.
- Semi-finalist, Franz Edelman Award (INFORMS), 2009.  
Research paper: Chung, C., Dawande, M. and Sriskandarajah, C., "A Short Range Scheduling Model for Blockbuster's Order Processing Operation."
- Semi-finalist, Franz Edelman Award (INFORMS), 2002 and 2003.  
Research paper: Kumar, S., Ramanan, N., and Sriskandarajah, C., "Minimizing Cycle Time in Large Robotic Cells", *IIE Transactions*, 2005, 37, 2, pp. 123-136.
- Finalist for CORS Practice Prize (CORS/INFORMS), 1998.  
Research paper: Sriskandarajah, C., Jardine, A.K.S., and Chan, C.K., "Maintenance Scheduling of Rolling Stocks Using a Genetic Algorithm", *Journal of Operational Research Society (U.K.)*, (1998), 49, pp. 1130-1145.
- Semi-finalist, Franz Edelman Award (INFORMS), 1998.  
Research paper: Sriskandarajah, C., Jardine, A.K.S., and Chan, C.K., "Maintenance Scheduling of Rolling Stocks Using a Genetic Algorithm", *Journal of Operational Research Society (U.K.)*, (1998), 49, pp. 1130-1145.
- Dean's Special Merit Award for research, teaching and service to the University, University of Toronto, Canada, 1992 and 1993.
- Post Doctoral Fellow (funded by NSERC), Faculty of Management, University of Toronto, Canada, 1986-1987.
- French Government Doctoral Fellowship, 1981-1986.
- Carl Duisberg Gesellschaft Scholarship, awarded by the Federal Republic of Germany for the Master of Engineering Program at A.I.T., Bangkok, Thailand, 1979-1981.

## PROFESSIONAL EXPERIENCE

- **Ashbel Smith Professor**, School of Management, University of Texas at Dallas, U.S.A, September 2006 - to date.  
Primary responsibilities: Teach courses in the production management and optimization methods; Research activities in the fields of production planning, scheduling and control, Supply Chain Management.
- **Professor**, School of Management, University of Texas at Dallas, U.S.A, September 2001 - August 2006.  
Primary responsibilities: Teach courses in the production management and optimization methods; Research activities in the fields of production planning, scheduling and control, Telecommunications planning, Supply Chain Management.
- **Associate Professor**, School of Management, University of Texas at Dallas, U.S.A, July 1998 - August 2001.  
Primary responsibilities: Teach courses in the production management and optimization methods; Research activities in the fields of production planning, scheduling and control, Telecommunications planning.
- **Associate Professor**, Department of Industrial Engineering, University of Toronto, Canada, July 1994 - June 1998.  
Primary responsibilities: Establish a manufacturing system laboratory; Teach courses in the production and manufacturing area; Research activities in the fields of production planning, scheduling and control.
- **Assistant Professor**, Department of Industrial Engineering, University of Toronto, Canada, June 1990 - June 1994.  
Primary responsibilities: Establish a manufacturing system laboratory; Teach courses in the production and manufacturing area; Research activities in the fields of production planning, scheduling and control.
- **Researcher** (Research professor position equivalent to Assistant Professor), GERAD, Ecole Polytechnique, Montreal, Canada, July 1987 - May 1990.  
Primary responsibilities: Research activities in the field of manufacturing and production control; Teach graduate courses in the fields of production planning and scheduling manufacturing systems.
- **Postdoctoral Research Fellow**, Faculty of Management Studies, University of Toronto, Canada, May 1986 - June 1987.  
Major research activities: Flexible manufacturing system scheduling; Design and analysis of scheduling algorithms; Performance guarantees for approximative algorithms.
- **Research Assistant**, Higher National School of Electrical Engineering, National Polytechnic Institute of Grenoble, France, Sept 1983 - April 1986. Industrial interactions during doctorate program, particularly with Telemecanique Electrique Corporation, France. Comprehensive understanding of industry's manufacturing needs, environment, systems and realities. Have made site visits and worked together with them on scheduling problems. Modelled and analyzed the system and developed scheduling policies for a system under development.

- **Assistant Mechanical Engineer**, Ceylon Petroleum Refinery, SriLanka, May 1978 - August 1979. Worked at Inspection Department of the Ceylon Petroleum Refinery. Primary responsibilities: Inspection of equipment, columns, boilers, reactors, ejectors, heat exchangers, etc., for corrosion, erosion, wear and condition of equipment. Making recommendations for repairs and/or renewals; Testing of equipment. Failure analysis and checking of design calculation. As an inspection engineer, I have been directly involved in major inspection maintenance shut-downs of the plant.
- **Instructor**, Mechanical Engineering Department, University of SriLanka, November 1977 - May 1978. The duties were supervising Laboratory, Tutorial and Design classes in Thermodynamics, Applied Mechanics and Machine Design for undergraduate students.
- **Undergraduate Trainee** Practical training at Ceylon Steel Corporation, SriLanka, December 1975 - July 1976, and Ceylon Government Railways workshop, SriLanka, December 1974 to January 1975.

## **RESEARCH INTERESTS**

### **CURRENT AND FUTURE RESEARCH INTERESTS**

- Production Planning and Scheduling.
- Supply Chain Management.
- Logistics.
- Performance Evaluation of Production Systems.
- Computational Complexity, Design and Analysis of algorithms for combinatorial problems.

### **MEMBERSHIP IN PROFESSIONAL SOCIETIES**

- The Institute of Operations Research and the Management Sciences (INFORMS)
- Production and Operations Management Society (POM)
- Decision Sciences Institute (DSI)
- APICS
- Institute of Industrial Engineers, U.S.A. (IIE)
- Institute of Electrical and Electronics Engineers, U.S.A. (IEEE)

### **SERVICE TO PROFESSION**

**Associate Executive Director**, Production and Operations Management Society (POMS).  
March 2004 - to date.

**Editorial Review Board**, Manufacturing and Service Operations Management, INFORMS Journal, January 2003 - December 2005.

**Senior Editor**, Production and Operations Management, January 2006 - to date.

**Associate Editor**, Journal of Scheduling, January 2007 - December 2009.

**Associate Editor**, INFOR, Canadian Journal of Information Systems and Operational Research, 1992 - May 2007.

**Reviewed research papers for:** Operations Research, Management Science, Operations Research Letters, Annals of Operations Research, IEEE Transactions on Robotic and Automation,

IIE Transactions, European Journal of Operational Research, Journal of Operational Research Society (U.K.), International Journal of Flexible Manufacturing Systems, IEEE Transactions on Automatic Control, INFOR (Canada), International Journal of Production Economics, Computers and Operations Research, Journal of Scheduling.

**Reviewed research grants for:** NSF, Natural Sciences and Engineering Research Council (Canada).

### **Technical Consulting and Advisory Activities**

1. **Client:** Blockbuster, McKinney, TX, USA,  
**Activity:** Forecast Model for Short-Life-Cycle Products: New Releases at Blockbuster  
**Duration:** January 2008-December 2009.
2. **Client:** BNSF Railway Company, Fort Worth, TX, USA,  
**Activity:** Locomotive Scheduling Project  
**Duration:** July 2006-December 2007.
3. **Client:** Brinks, Dallas, TX, USA,  
**Activity:** Develop Supply Chain Models,  
**Duration:** June 2004-March 2005.
4. **Client:** FSI International, Allen, TX, USA,  
**Activity:** Develop Scheduling Algorithms for Robotic Cells to Enhance Productivity,  
**Duration:** September 2000-December 2000.
5. **Client:** Chevron/Fina, Dallas, TX,  
**Activity:** Develop a Linear Programming Model for Optimizing Two Companies' Combined Supply Networks for Blending/Manufacturing Operations (as a MS student Project),  
**Duration:** January 2000-May 2000.
6. **Client:** Dependable Auto Shippers, Dallas, TX  
**Activity:** Develop Truck Routing Optimization Procedures for the Dependable Auto Shippers (as a MS student Project),  
**Duration:** January 2000-May 2000.
7. **Client:** Motorola Semiconductor Hong Kong Limited,  
**Activity:** Cycle time reduction for design projects (as a part of my research activities during sabbatical),  
**Duration:** February 1997-June 1997.
8. **Client:** Hong Kong Mass Transit Railway Corporation,  
**Activity:** Develop maintenance scheduling of Trains (as a part of my research activities during sabbatical),  
**Duration:** August 1996-December 1996.

### **RESEARCH GRANTS**

1. **Title:** L'ordonnement dans un atelier flexible,  
**Supporting Agency:** Ecole Polytechnique de Montréal,  
**Amount:** \$4,000,  
**Grant Period:** July 1987-June 1988.
2. **Title:** Résolution de problèmes d'ordonnement et de conception de machine (Research Group: M. Desrochers, PI; C. Sriskandarajah, B. Jaumard; co-investigators),

- Supporting Agency:** FCAR,  
**Amount:** \$45,000/year,  
**Grant Period:** June 1988-May 1990.
3. **Title:** Production planning and scheduling,  
**Supporting Agency:** NSERC,  
**Amount:** \$11,500/year,  
**Grant Period:** April 1989-March 1992.
  4. **Title:** Production scheduling in a robotic cell,  
**Supporting Agency:** University of Toronto (Connaught, phase I, New Staff Grant),  
**Amount:** \$5,000/year,  
**Grant Period:** June 1990-June 1992.
  5. **Title:** Planning, scheduling, and control of manufacturing, (Research Group: S.P. Sethi, PI; C. Sriskandarajah, S. Lou, D. Krass, co-investigators),  
**Supporting Agency:** MRCO,  
**Amount:** \$148,600 for 1/4/91-31/3/92.  
**Amount:** \$112,800 for 1/4/92-31/12/92.
  6. **Title:** Production planning and scheduling in modern manufacturing systems,  
**Supporting Agency:** NSERC,  
**Amount:** \$25,000/year,  
**Grant Period:** April 1992-March 1995.
  7. **Title:** Distribution management of order life cycle function, (Research Group: M.S. Fox, PI; C. Sriskandarajah, M. Chignell, A.K.S. Jardine and V. Makis, co-investigators),  
**Supporting Agency:** MRCO,  
**Amount:** \$150,000/year,  
**Grant Period:** 1993-1995.
  8. **Title:** Production planning and scheduling in modern manufacturing systems,  
**Supporting Agency:** NSERC,  
**Amount:** \$28,000/year,  
**Grant Period:** April 1995-March 1999.
  9. **Title:** Minicomputer for production planning, scheduling and control research,  
**Supporting Agency:** NSERC (Equipment Grant),  
**Amount:** \$11,130/year,  
**Grant Period:** April 1995-March 1996.
  10. **Title:** Scheduling in Modern Manufacturing Systems, (Research Group: N.G. Hall; C.N. Potts; C. Sriskandarajah),  
**Supporting Agency:** NATO,  
**Amount:** \$9,200,  
**Grant Period:** January 1996-January 1998.
  11. **Title:** Supervisory Control of Flexible Manufacturing Systems, (Research Group: B. Benhabib, PI; C. Sriskandarajah, J.K.Mills, co-investigators),  
**Supporting Agency:** MMO,  
**Amount:** \$160,000,  
**Grant Period:** January 1998-January 1999.
  12. **Title:** Production Planning and Scheduling in Manufacturing/Service systems,  
**Supporting Agency:** (NSERC) Natural Sciences and Engineering Research Council of

Canada

**Amount:** \$32,340/year,

**Grant Period:** April 1999-March 2000.

13. **Title:** Optimum Throughput Model Program for Robotic Cells,  
**Supporting Agency:** FSI International, Allen, Texas, USA,  
**Amount:** \$27,082  
**Grant Period:** September 2000-June 2001.
14. **Title:** Collaborative Research/Scheduling Methodologies for Electronics and hardware manufacturing,  
(Research Group: R. Logendran, Co-PI; C. Sriskandarajah, Co-PI),  
**Supporting Agency:** (NSF) National Science Foundation  
**Amount:** \$250,000  
**Grant Period:** July 2001-June 2003.

## II. SCHOLARLY AND PROFESSIONAL WORK

### REFEREED JOURNAL PUBLICATIONS

1. Chung, C., Niu, S-C., Sriskandarajah, C., "A Sales Forecast Model for Short-Life-Cycle Products: New Releases at Blockbuster," **Production and Operations Management**, 2012, to appear.
2. Mehrotra, M., Dawande, M., Mookerjee V., Sriskandarajah, C., " Pricing and Logistics Decisions for a Private-Sector Provider in the Cash Supply Chain," **Production and Operations Management**, 2012, to appear.
3. Dawande, M., Mookerjee, V. and Sriskandarajah, C., Zhu, Y., "Search and Optimization in the Social Networks," **INFORMS Journal on Computing**, 2012, to appear.
4. Kazan, O., Dawande, M., Sriskandarajah, C., Stecke, K. E., " Balancing Perfectly Periodic Service Schedules: An Application from Recycling and Waste Management," **Naval Research Logistics**, 2012, to appear.
5. Geismar, H. N., Manoj, U.V., Sethi, A., Sriskandarajah, C. "Scheduling Robotic Cells served by a Dual-Arm Robot," **IIE Transactions**, 2012, 44, pp. 230-248.
6. Manoj, U.V., Sriskandarajah, C., Wagneur, E. "Coordination in a Two-Stage Production System: Complexity, Conflict and Cooperation," **Computers and Operations Research**, 2012, 39, pp. 1245-1256.
7. Rajapakshe, T., Dawande, M., Gavirneni, S., Sriskandarajah, C. "On the Tradeoff Between Remanufacturing and Recycling," **International Journal of Services and Operations Management**, 2012, to appear.
8. Rajapakshe, T., Dawande, M., Sriskandarajah, C. "Quantifying the Impact of Layout on Productivity: An Analysis from Robotic-Cell Manufacturing," **Operations Research**, 2011, 59, 2, pp. 440-454.
9. Geismar, H. N., Dawande, M. and Sriskandarajah, C., "Pool-Point Distribution of Zero-Inventory Products," **Production and Operations Management**, 2011, 20, 5, pp. 737-753.
10. Zhu, Y., Dawande, M. and Sriskandarajah, C., "Value of Local Cash Reuse: Inventory Models for Medium-Size Depository Institutions under the New Federal Policy," **Manufacturing and Service Operations Management**, 2011, 13, 4, pp. 508-524.

11. Chung, C., Dawande, M., Rajamani, D. and Sriskandarajah, C., "A Short Range Scheduling Model for Blockbuster's Order Processing Operation," **Interfaces**, 2011, 41, 5, pp. 466-484.
12. Geismar, H. N., Dawande, M. and Sriskandarajah, C., "Productivity Improvements from Using Machine Buffers in Dual-gripper Cluster Tools," **IEEE Transactions on Automation Science & Engineering**, 2011, 18, 1, pp. 29-41.
13. Dawande, M., Gavirneni, S., Mu, Y., Sethi, S. and Sriskandarajah, C., "On the Interaction between Demand Substitution and Production Changeovers," **Manufacturing and Service Operations Management**, 2010, 12, 4, pp. 682-691.
14. Mehrotra, M., Dawande, M. and Sriskandarajah, C., "A Depository Institution's Optimal Currency Supply Network under the Fed's New Guidelines: Operating Policies, Logistics, and Impact," **Production and Operations Management**, 2010, 19, 6, pp. 709-724.
15. Lui, D., Sarkar, S., and Sriskandarajah, C., "Resource Allocation Policies for Personalization in Content Delivery Sites," **Information Systems Research**, 2010, 21, 2, pp. 227-248.
16. Dawande, M., Mehrotra, M., Mookerjee, V. and Sriskandarajah, C., "An Analysis of Coordination Mechanisms for the U.S. Cash Supply Chain," **Management Science**, 2010, 56, 3, pp. 553-570.
17. Dawande, M., Drobouchevitch, I., Rajapakshe, T., Sriskandarajah, C. "Analysis of Revenue Maximization Under Two Movie-Screening Policies," **Production and Operations Management**, 2010, 19, 1, pp. 111-124.
18. Dawande, M., Geismar, H. N., Pinedo, M. and Sriskandarajah, C., "Throughput Optimization in Dual Gripper Interval Robotic Cells," **IIE Transactions**, 2010, 42, 1, pp. 1-15.
19. Drobouchevitch, I., Geismar, H. N., Sriskandarajah, C. "Throughput Optimization in Robotic Cells with Input and Output Machine Buffers: A Comparative Study of Two Key Models," **European Journal of Operational Research**, (2010), 206, pp. 623-633.
20. Gale, T., Rajamani, D., Reyes, P.M. and Sriskandarajah, C., "The Impact of RFID on Supply Chain Performance", **Technology Operation and Management (TOM)**, 2010, 1, 2, pp. 1-13.
21. Dawande, M., Pinedo, M. and Sriskandarajah, C., "Multiple Part-Type Production in Robotic Cells: The Equivalence of Two Real-World Models," **Manufacturing and Service Operations Management**, (2009), 11, 2, pp. 210-228.
22. Gupta, S., Manoj, U.V. and Sriskandarajah, C., "Supply Chain Distribution Logistics to Minimize Inventory Holding Cost with Dominant Upstream Partner," **Journal of Systems Science and Systems Engineering**, (2009), 18, 2, pp. 159-183.
23. Manoj, U.V., Dawande, M., Rajamani, D., Sriskandarajah, C. "Mitigating the Risk of Supply Disruptions: A Case Study," **International Journal of Operational Research**, (2009), 5, 2, pp. 131-151.
24. Geismar, H. N., Pinedo, M. and Sriskandarajah, C., "Robotic Cells with Parallel Machines and Multiple Dual Gripper Robots: a Comparative Overview," **IIE Transactions**, (2008), 40, 12, pp. 1211-1227.
25. Dawande, M., Kumar, S., Mookerjee, V. and Sriskandarajah, C., "Maximum Commonality Problems: Applications and Analysis", **Management Science**, (2008), 54, 1, pp. 194-207.
26. Geismar, H. N., Laporte, G., Lei, L., and Sriskandarajah, C., "The Integrated Production and Scheduling Problem for a Product with Short Life Span," **INFORMS Journal on Computing**, (2008), 20, 1, pp. 21-33.

27. Arkali, G., Dawande, M. and Sriskandarajah, C., "Scheduling Support Times for Satellites with Overlapping Visibilities," **Production and Operations Management**, (2008), 17, 2, pp. 224-234.
28. Geismar, H.N., Chan, L.M. A., Dawande, M. and Sriskandarajah, C., "Approximations to Optimal  $k$ -unit Cycles for Single-Gripper and Dual-Gripper Robotic Cells," **Production and Operations Management**, (2008), 17, 5, pp. 551-563.
29. Manoj, U.V., Gupta, J.N.D., Gupta, S. and Sriskandarajah, C., "Supply Chain Scheduling: Just-in-Time Environment," **Annals of Operations Research**, (2008), 161, pp. 53-86.
30. Dawande, M., Gupta, R., Naranpanawe, S. and Sriskandarajah, C. "A Traffic Grooming Algorithm for Wavelength Routed Optical Networks." **INFORMS Journal on Computing**, (2007), 19, 4, pp. 565-574.
31. Geismar, H.N., Dawande, M, Rajamani, D. and Sriskandarajah, C., "Managing a Bank's Currency Inventory Under New Federal Reserve Guidelines", **Manufacturing and Service Operations Management**, (2007), 9, 2, pp. 147-167.
32. Geismar, H. N., Dawande, M. and Sriskandarajah, C., "A  $\frac{10}{7}$  Approximation Algorithm for an Optimum Cyclic Solutions for Additive Travel-time Robotic Cells", **IIE Transactions**, (2007), 39, pp. 217-227.
33. Rajamani, D., Geismar, H. N. and Sriskandarajah, C., "A Framework to Analyze Cash Supply Chains," **Production and Operations Management**, Feature issue on closed-loop supply chain, (2006), 15, 4, pp. 544-552.
34. Dawande, M., Geismar, H. N., Hall, N.G. and Sriskandarajah, C., "Supply Chain Scheduling: Distribution Systems," **Production and Operations Management**, (2006), 15, 2, pp. 243-261.
35. Geismar, H. N., Dawande, M. and Sriskandarajah, C., "Throughput Optimization in Constant Travel-Time Dual gripper Robotic Cells with Parallel Machines", **Production and Operations Management**, (2006), 15, 2, pp. 311-328.
36. Kumar, S., Jacob, V. and Sriskandarajah, C., "Scheduling Advertisements on a Web Page to Maximize Space Utilization", **European Journal of Operational Research**, (2006), 173, pp. 1067-1089.
37. Drobouchevitch, I., Sethi, S.P. and Sriskandarajah, C., "Scheduling Dual Gripper Robotic Cells : One-unit Cycles", **European Journal of Operational Research**, (2006), 171, 2, pp. 598-631.
38. Bagchi, T.P., Gupta, J.N.D. and Sriskandarajah, C. "A review of TSP based approaches for flowshop scheduling", **European Journal of Operational Research**, (2006), 169, 3, pp. 816-854.
39. Logendran, R., Salmasi, N. and Sriskandarajah, C., "Two-Machine Group Scheduling Problems in Discrete Parts Manufacturing with Sequence-Dependent Setups", **Computers and Operations Research**, (2006), 33, pp. 158-180.
40. Hall, N.G., Laporte, G., Selvarajah, E. and Sriskandarajah, C., "Scheduling and Lot Streaming in Openshops with No-wait in Process", **Naval Research Logistics**, (2005), 52, 3, pp. 261-275.
41. Geismar, H.N., Sethi, S.P., Sidney, J.B. and Sriskandarajah, C., "A Note on Productivity Gains in Flexible Robotic Cells", **International Journal of Flexible Manufacturing Systems**, (2005), 17, pp. 5-21.

42. Dawande, M., Geismar, H. N., Sethi, S.P. and Sriskandarajah, C., "Sequencing and Scheduling in Robotic Cells: Recent Developments", **Journal of Scheduling**, (2005), 8, pp. 387-426.
43. Dawande, M., Kumar, S. and Sriskandarajah, C., "Scheduling Web Advertisements: A Note on the MINSPACE Problem", **Journal of Scheduling**, (2005), 8,1, pp. 97-106.
44. Kumar, S., Ramanan, N., and Sriskandarajah, C., "Minimizing Cycle Time in Large Robotic Cells", **IIE Transactions**, (2005), 37, 2, pp. 123-136.
45. Geismar, H. N., Dawande, M. and Sriskandarajah, C., "Approximation Algorithms for  $k$ -unit Cyclic Solutions in Robotic Cells", **European Journal of Operational Research**, (2005), 162, pp. 291-309.
46. Lung, J. Y-T., Li, H., Pinedo, M. and Sriskandarajah, C., "Open Shops with Jobs Overlap – revisited", **European Journal of Operational Research**, (2005), 163, pp. 569-571.
47. Sriskandarajah, C., Drobouchevitch, I., Sethi, S.P. and Chandrasekaran, R., "Scheduling Multiple parts in a Robotic Cell Served by a Dual Gripper Robot", **Operations Research**, (2004), 52, 1, pp. 65-82.
48. Drobouchevitch, I., Sethi, S.P., Sidney, J.B. and Sriskandarajah, C. "Scheduling Multiple Parts in Two-machine Dual Gripper Robotic Cells: Heuristic Algorithm and Performance Guarantee", **International Journal of Operations and Quantitative Management**, (2004), 10, 4, pp. 297-314.
49. Geismar, H. N., Dawande, M., and Sriskandarajah, C., "Robotic Cells with parallel Machines: Throughput Maximization in Constant Travel-Time Cells", **Journal of Scheduling**, (2004), 7, pp. 375-395.
50. Geismar, H. N., Sriskandarajah, C. and N. Ramanan, N., "Increasing Throughput for Robotic Cells with Parallel Machines and Multiple Robots", **IEEE Transactions on Automation Science & Engineering**, (2004), 1, 1, pp. 84-89.
51. Bagchi, T.P., Naranpanawe, S. and Sriskandarajah, C. "A Blocking Flowshop Scheduling Problem with Material Handling Constraint", **International Journal of Operations and Quantitative Management**, (2003), 9, pp. 1-20.
52. Dawande, M., Kumar, S. and Sriskandarajah, C., "Performance Bounds of Algorithms for Scheduling Advertisements on a Web Page", **Journal of Scheduling**, (2003), 6, pp. 373-393.
53. Hall, N.G., Laporte, G., Selvarajah, E. and Sriskandarajah, C., "Scheduling and Lot Streaming in Flowshops with No-wait in Process", **Journal of Scheduling**, (2003), 6, pp. 339-354.
54. Logendran, R., Gelogullari, C. A. and Sriskandarajah, C., "Minimizing the Mean Flow Time in a Two-Machine Group Scheduling Problem with Carryover Sequence Dependency", **Journal of Robotics and Computer Integrated Manufacturing**, (2003), 19, pp. 21-33.
55. Dawande, M., Sriskandarajah, C. and Sethi, S.P., "On Throughput Maximization in Constant Travel-Time Robotic Cells", **Manufacturing and Service Operations Management**, (2002), 4, 4, pp. 296-312.
56. Yan, H., Sriskandarajah, C., Sethi, S.P., and Yue, X., "Supply Chain Redesign to Reduce Safety Stock Levels: Sequencing and Merging Operations", **IEEE Transactions on Engineering Management, Special Issue on Supply Chain Management**, (2002), 49, 3, pp. 243-257.

57. Yeh D., Sethi, A., Sethi, S.P. and Sriskandarajah, C. "Scheduling of the Injection Process for Golf Club Head Fabrication Lines", **International Journal of Operations and Quantitative Management**, (2001), 7, pp. 149-164.
58. Hall, N.G., Sriskandarajah, C. and Ganesharajah, T. "Operational Decisions in AGV-Served Flowshop Loops: Scheduling", **Annals of Operations Research**, (2001), 107, pp. 161-188.
59. Hall, N.G., Sriskandarajah, C. and Ganesharajah, T. "Operational Decisions in AGV-Served Flowshop Loops: Fleet Sizing and Decomposition", **Annals of Operations Research**, (2001), 107, pp. 189-209.
60. Sethi, S.P., Sidney, J.B. and Sriskandarajah, C., "Scheduling in Dual Gripper Robotic Cells for Productivity Gains", **IEEE Transactions on Robotics and Automation**, (2001), 17, pp. 324-341.
61. Caraffa, V., Ianes, S., Bagchi, T. and Sriskandarajah, C., "Minimizing Makespan in a Blocking Flowshop using Genetic Algorithms", **International Journal of Production Economics**, (2001), 70, pp. 101-115.
62. Asef-Vaziri, A., Dessouky, M. and Sriskandarajah, C., "A Loop Material Flow System Design for Automated Guided Vehicles", **International Journal of Flexible Manufacturing Systems**, (2001), 13, pp. 33-48.
63. Ramirez, A., Sriskandarajah, C. and Benhabib, B., "Automata-Based Modeling and Control Synthesis of Manufacturing Workcells with Part-Routing Flexibility", **IEEE Transactions on Robotics and Automation**, (2000), 16, 6, pp. 807-823.
64. Abadi, I.N.K., Hall, N.G. and Sriskandarajah, C., "Minimizing Cycle Time in a Blocking Flowshop", **Operations Research**, (2000), 48, pp. 177-180.
65. Sidney, J.B., Potts, C.N. and Sriskandarajah, C., "A Heuristic for Scheduling Two-machine No-wait Flowshops with Anticipatory Setups", **Operations Research Letters**, (2000), 26, 4, pp. 165-173.
66. Asef-Vaziri, A., Laporte, G. and Sriskandarajah, C., "The Block Layout Shortest Loop Problem", **IIE Transactions**, (2000), 32, pp. 727-734.
67. Hall, N.G., Potts, C.N. and Sriskandarajah, C., "Parallel Machine Scheduling with a Common Server", **Discrete Applied Mathematics**, (2000), 102, pp. 223-243.
68. Cheng, T. C. E., Sriskandarajah, C. and Wang, G., "Two- and Three-stage Flowshop Scheduling with No-wait in Process", **Production and Operations Management**, (2000), 9, 4, pp. 367-378.
69. Kumar, S., Bagchi, T.P. and Sriskandarajah, C., "Lot Streaming and Scheduling Heuristics for m-machine No-wait Flowshops", **Computers and Industrial Engineering**, (2000), 38, pp. 149-172.
70. Kamoun, H., Hall, N.G. and Sriskandarajah, C., "Scheduling in Robotic Cells: Heuristics and Cell Design", **Operations Research**, (1999), 47, pp. 821-835.
71. Sriskandarajah, C. and Wagneur, E., "Lot Streaming and Scheduling Multiple Products in Two-machine No-wait Flowshops", **IIE Transactions**, (1999), 31, pp. 695-707.
72. Cheng, T. C. E., Wang, G. and Sriskandarajah, C., "One-operator Two-machine Flowshop Scheduling with Setup and Dismounting Times", **Computers and Operations Research**, (1999), 26, pp. 715-730.

73. Sethi, S.P., Sriskandarajah, C., Van De Velde, S., Wang, Y. and Hoogeveen, H., "Minimizing Makespan in a Pallet-Constrained Flowshop", **Journal of Scheduling**, (1999), 2, 3, pp. 115-133.
74. Lin, B. C., Lam, F.S.C. , Sriskandarajah, C. and Yan, H. , "Scheduling to Minimize Product Design Time Using a Genetic Algorithm", **International Journal of Production Research**, (1999), 37, 6, pp. 1369-1386.
75. Sidney, J. B. and Sriskandarajah, C., "A Heuristic for the Two-machine No-wait Openshop scheduling Problem", **Naval Research Logistics**, (1999), 46, pp. 129-145.
76. Sriskandarajah, C., Jardine, A.K.S., and Chan, C.K., "Maintenance Scheduling of Rolling Stocks Using a Genetic Algorithm", **Journal of Operational Research Society (U.K.)**, (1998), 49, pp. 1130-1145.
77. Sriskandarajah, C., Hall, N.G. and Kamoun, H., "Scheduling Large Robotic Cells without Buffers", **Annals of Operations Research**, (1998), 76, pp. 287-321.
78. Ganesharajah, T., Hall, N.G. and Sriskandarajah, C., "Design and Operational issues in AGV-Served Manufacturing Systems", **Annals of Operations Research** , (1998), 76, pp. 109-154.
79. Hall, N.G., Kamoun, H. and Sriskandarajah, C., "Scheduling in Robotic Cells: Complexity and Steady State Analysis", **European Journal of Operational Research**, (1998), 109, pp. 43-65.
80. Wang, Y., Sethi, S.P., Sriskandarajah, C. and Van De Velde, S.L., "Minimizing Makespan in Flowshops with Pallet Requirements: Computational Complexity", **INFOR**, (1997), 35, 4, pp. 277-285.
81. Hall, N.G., Kamoun, H. and Sriskandarajah, C., "Scheduling in Robotic Cells: Classification, Two and Three Machine Cells", **Operations Research**, (1997), 45, pp. 421-439.
82. Logendran, R. and Sriskandarajah, C., "A Mathematical Modeling Approach for the Process of Part Orientation in Batch Assembly Automation", **International Journal of Computer Integrated Manufacturing**, (1997), 10, 5, pp. 335-345.
83. Hall, N.G. and Sriskandarajah, C., "A Survey of Machine Scheduling Problems with Blocking and No-wait in Process", **Operations Research**, (1996), 44, pp. 510-525.
84. Laporte, G., Asef-Vaziri, A. and Sriskandarajah, C., "Some Applications of the Generalized Traveling Salesman Problem", **Journal of Operational Research Society (U.K.)**, (1996), 47, pp. 1461-1467.
85. Wang, Y., Yan, H. and Sriskandarajah, C., "The Weighted Sum of Split and Diameter Clustering", **Journal of Classification**, (1996), 13, pp. 231-248.
86. Logendran, R. and Sriskandarajah, C., "Sequencing of Robot Activities and Parts in Two Machine Robotic Cells", **International Journal of Production Research**, (1996), 34, 12, pp. 3447-3463.
87. Kubiak, W., Sethi, S.P. and Sriskandarajah, C., "An Efficient Algorithm for a Jobshop Problem", **Annals of Operations Research** , (1995), 57, pp. 203-216.
88. Sriskandarajah, C. and Wagneur, E., "On the Complexity of Preemptive Openshop Scheduling Problems", **European Journal of Operational Research**, (1994), 77, pp. 404-414.
89. Logendran, R., Ramakrishna, P. and Sriskandarajah, C., "Tabu Search Based Heuristics for Cellular Manufacturing Systems in the Presence of Alternative Process Plans", **International Journal of Production Research**, (1994), 32, 2, pp. 273-297.

90. Wagneur, E. and Sriskandarajah, C. "Openshops with Jobs Overlap", **European Journal of Operational Research**, (1993), 71, pp. 366-378.
91. Sriskandarajah, C., "Performance of Scheduling Algorithms for No-wait Flowshops with Parallel Machines", **European Journal of Operational Research**, (Special Issue on Machine Scheduling Problems) (1993), 70, 3, pp. 365-378.
92. Kamoun, H. and Sriskandarajah, C., "The Complexity of Scheduling Jobs in Repetitive Manufacturing Systems", **European Journal of Operational Research**, (Special Issue on Machine Scheduling Problems) (1993), 70, 3, pp. 350-364.
93. Logendran, R. and Sriskandarajah, C., "Two-machine Group Scheduling Problem with Blocking and Anticipatory Setups", **European Journal of Operational Research**, (Special Issue on Cellular Manufacturing Systems) (1993), 69, 3, pp. 467-481.
94. Wagneur, E. and Sriskandarajah, C., "The Two-machine Permutation Flowshop with State Dependent Processing Times", **Naval Research Logistics**, (1993), 40, pp. 697-717.
95. Wagneur, E. and Sriskandarajah, C., "Optimal Control of a Class of DEDS: Flow-Shops with State Dependent Processing Times", **Journal of Discrete Event Dynamic Systems**, (1993), 3, pp. 397-425.
96. Jaumard, B., Lou, S., Lu, S.H., Sethi, S.P. and Sriskandarajah, C., "Heuristics for the Design of Part Orienting Systems", **International Journal of Flexible Manufacturing Systems**, (1993), Vol. 5, pp. 167-185.
97. Sethi, S.P., Sriskandarajah, C., Sorger, G., Blazewicz, J., and Kubiak, W., "Sequencing of Parts and Robot Moves in a Robotic Cell", **International Journal of Flexible Manufacturing Systems**, (1992), Vol. 4, 3-4, pp. 331-358.
98. Kubiak, W., Sriskandarajah, C. and Zaras, K., "A Note on the Complexity of Openshop Scheduling Problems", **INFOR, Canadian Journal of Information Systems and Operational Research**, (1991), 29, 4, pp. 284-294.
99. Hall, N.G., Sethi, S.P. and Sriskandarajah, C., "On the Complexity of Generalized Due Date Scheduling Problems", **European Journal of Operational Research** (1991), 51, 1, pp. 100-109.
100. Sriskandarajah, C. and Wagneur, E., "Hierarchical Control of the Two Processor Flow-Shop with State Dependent Processing Times: Complexity Analysis and Approximate Algorithms", **INFOR, Canadian Journal of Information Systems and Operational Research** (1991), 29, 3, pp. 193-205.
101. Sriskandarajah, C., "A note on the Generalized Due Dates Scheduling Problems", **Naval Research Logistics** (1990), 37, pp. 587-597.
102. Sethi, S. P., Sriskandarajah, C., Tayi, G. K. and Rao, M.R., "Heuristic Methods for Selection and Ordering of Part-orienting Devices", **Operations Research** (1990), 38, 1, pp. 84-98.
103. Jaumard, B., Lu, S.H., and Sriskandarajah, C., "Design Parameters Selection and Ordering of Part-orienting Devices", **International Journal of Production Research** (1990), 28, 3, pp. 459-476.
104. Sriskandarajah, C. and Sethi, S.P., "Scheduling Algorithms for Flexible Flowshops: Worst and Average Case Performance", **European Journal of Operational Research** (1989), 43, 2, pp. 143-160.
105. Sriskandarajah, C. and Goyal, S.K., "Scheduling of a Two- Machine Flowshop with Processing Time Linearly Dependent on Job Waiting-time", **Journal of Operational Research Society (U.K.)** (1989), 40, 10, pp. 907-921.

106. Sriskandarajah, C., Sethi, S. P. and Ladet, P., "Scheduling Methods for a Class of Flexible Manufacturing Systems", **Annals of Operations Research** (1989), 17, pp. 139-162.
107. Goyal, S.K. and Sriskandarajah, C., "No-wait Shop Scheduling: Computational Complexity and Approximate Algorithms", **Opsearch, Journal of the Operational Research Society of India**, (1988), 25, 4, pp. 220-244.
108. Sriskandarajah, C. and Ladet, P., "Some No-wait Shops Scheduling Problems: Complexity Aspect", **European Journal of Operational Research**, (1986), 24, 3, pp. 424-438.

#### REFEREED CONTRIBUTIONS TO EDITED BOOKS

1. Sriskandarajah, C., Ladet, P. and Germain, R., "Scheduling Methods for a Manufacturing System". **Flexible Manufacturing Systems: Methods and Studies**, edited by Andrew Kusiak, Elsevier Science Publishers, B.V. North-Holland, Amsterdam, (1986), pp. 173-189.
2. Rajamani, D. Sriskandarajah, C., Pickens, T. and Hameed. S. 2009. "A Framework for Risk Management in Supply Chains", Icfai University Press, India.

#### BOOKS

1. Dawande, M., Geismar, H. N., Sethi, S.P., Sriskandarajah, C. 2007. *Throughput optimization in Robotic Cells*, Springer.

#### RESEARCH-IN-PROGRESS

##### Papers submitted to refereed journals:

1. Geismar, H. N., Dawande, M., Murthi, B.P.S., Sriskandarajah, C., "Maximizing Revenue Through Two-dimensional Shelf Space Allocation," **Marketing Science**, January 2011.
2. Mu, L., Dawande, M., Gavirneni, S., Sriskandarajah, C., "Product-Line Extensions: Analysis, Insights, and Intuition," **Production and Operations Management**, September 2011.
3. Rajapakshe, T., Dawande, M., Gavirneni, S., Sriskandarajah, C. "Designing Dedicated Transportation Subnetworks: Deadheading vs. Lane-Sharing," **Manufacturing and Service Operations Management**, December 2011.
4. Jung, K.S., Geismar, H.N., Pinedo, M., Sriskandarajah, C., " Throughput Optimization in Dual-Gripper Robotic Cells in a Circular Layout," **Operations Research**, February 2012.

##### Working papers/work-in-progress:

1. Jung, K.S., Dawande, M., Geismar, H. N., Sriskandarajah, C. "Supply Planning Models for Just-in-Time Manufacturing Environment with Remanufacturing and Reverse logistics," *Working Paper*, January 2012.
2. Jung, K.S., Chung, C., Niu, S-C., Sriskandarajah, C., " Demand Modeling and Inventory Decisions for the Online Movie Rental Industry," *Working Paper*, July 2011.
3. Lui, D., Sarkar, S., Sriskandarajah, C. "Allocating Personalization Resources for Content Delivery Sites facing Non-Linear Payoff Functions," *Working Paper*, July 2011.
4. Huang, Y., Rajamani, D., Sethi, S.P., Sriskandarajah, C. "Optimizing Currency Network for a Large Bank's Operations," *Working Paper*, July 2011.

5. Sanchez, S. V. R., Kumar, S., Sriskandarajah, C., "Managing Inventory in the Mexican Currency Supply Chain," *Working Paper*, December 2011.
6. Geismar, H.N., Pinedo, M. Sriskandarajah, C., "Scheduling Dual-Gripper Robotic Cells: Optimization over 1-Unit Cycles and k-Unit Cycles," *Working Paper*, December 2011.
7. Drobouchevitch, I., Sriskandarajah, C., "Throughput Optimization in Interval Robotic Cells," *Working Paper*, April 2011.

## REFEREED CONFERENCE PROCEEDINGS

1. Sriskandarajah, C. "Complexity of Scheduling Dual-Gripper Robotic Cells," **ORSI-2010-ORURD**, Madurai, India, December 15-17, 2010.
2. Lui, D., Sarkar, S., Gupta, R. and Sriskandarajah, C., "Allocating Personalization Resources for Content Delivery Sites facing Non-Linear Payoff Functions", **Proceedings of the Workshop on Information Technologies and systems (WITS 2004)**, U.S.A., December, 2004.
3. Lui, D., Sarkar, S., Gupta, R. and Sriskandarajah, C., "Optimal Resource Allocation Policies for Website Personalization", **Proceedings of the CTIS04**, Denver, U.S.A., October, 2004.
4. Gupta, R., Naranpanawe, S. and Sriskandarajah, C., "A Heuristic for Traffic Grooming in Optical Networks", **Proceedings of the Workshop on Information Technologies and systems (WITS 2003)**, U.S.A., December, 2003.
5. Geismar, H. N., Dawande, M. and Sriskandarajah, C., "Scheduling Constant Travel-Time Dual Gripper Robotic Cells", **Proceedings of the International Conference of the Association of Asia-Pacific Operational Research Societies within IFORS**, New Delhi, India, December, 2003.
6. Sethi, S.P., Sidney, J.B. and Sriskandarajah, C., " Throughput Comparison of Robotic Flowshops Versus Robotic Openshops", **Proceedings of the International Conference of the Association of Asia-Pacific Operational Research Societies within IFORS**, New Delhi, India, December, Vol I, 2003, pp. 10-18.
7. Bagchi, T.P., and Sriskandarajah,C., "Flowshop Scheduling and the TSP Paradigm," **Proceedings of the International Conference of the Association of Asia-Pacific Operational Research Societies within IFORS**, New Delhi, India, December, Vol I, 2003, pp. 1-9.
8. Ozelkan, E., Geismar, H.N., and Sriskandarajah,C., "Optimal Procurement in a Group-Buying Framework," **Proceedings of the POM Conference**, Savannah, GA, April, 2003 (CD-ROM).
9. Logendran, R., and Sriskandarajah, C., "Scheduling Methodology for Hardware Manufacturing Systems", **Proceedings of the NSF Design, Service and Manufacturing Grantees & Research Conference**, Birmingham, AL, January, 2003 (CD-ROM).
10. Bagchi, T. P., Naranpanawe, S. and Sriskandarajah, C., "A Flowshop Scheduling Problem with Blocking", **Proceedings of the International Conference on Operations Research for Development, ICORD-2002**, Chennai, India, December, 2002.
11. Logendran, R., and Sriskandarajah, C., "Minimizing the Total Completion Time in a Two-Machine Group Scheduling Problem with Carryover Sequence Dependency", **Proceedings**

- of the NSF Design, Service and Manufacturing Grantees & Research Conference, San Juan, Puerto Rico, January, 2002 (CD-ROM).
12. Dawande, M., Kumar, S., and Sriskandarajah, C., "Improved Performance Bounds for Web Advertisement Scheduling", **Proceedings of the 11th Workshop on Information Technologies and systems (WITS 2001)**, New Orleans, U.S.A., December, 2001, pp. 17-22.
  13. Bagchi, T. P., Kumar, S., Sriskandarajah, C. and Soma, P., "Spacecraft Support in Remote Sensing Task Scheduling – Parts 1 & 2," OR-2001 XXXIV Annual Convention of the OR Society of India, Kolkata, December 25-27, 2001, Proceedings.
  14. Bagchi, T. P., Kumar, S., Dawande, M., and Sriskandarajah, C., "Optimal Spacecraft Support in Telecommunications Task Scheduling", ICOTA 2001, Hong Kong, December 15-17, 2001, Proceedings.
  15. Kumar, S., Jacob, V. and Sriskandarajah, C., "Hybrid Genetic Algorithms for Scheduling Advertisements on Web Page", **Proceedings of the ICIS 2001**, New Orleans, U.S.A., December, 2001, pp. 461-467.
  16. Dawande, M., Kumar, S. and Sriskandarajah, C., "Scheduling Advertisements on a Web Page: New and Improved Approximation Algorithms", Brazilian Symposium on Graphs, Algorithms and Combinatorics, March 17-19, 2001, **Electronic Notes in Discrete Mathematics**, Vol.7, the Symposium Proceedings, pp. 59-62.
  17. Kumar, S., Jacob, V. and Sriskandarajah, C., "Scheduling Advertising at a Web Site", **Proceedings of the 10th Workshop on Information Technologies and systems (WITS 2000)**, Brisbane, Queensland, Australia, December, 2000, pp. 37-42.
  18. Logendran, R. and Sriskandarajah, C., "Minimizing the Weighted Tardiness in a Two-Machine Flowshop scheduling Problem with Blocking and Anticipatory Setups", **Proceedings of the 9th Industrial Engineering Research Conference (IERC)**, Cleveland, OH, U.S.A, May 21-23, 2000 (CD-ROM).
  19. Sethi, S.P., Sriskandarajah, C., Chu, K.F. and Yan, H., "Efficient Setup/dispatching Policies in a Semiconductor Manufacturing Facility", **Proceedings of 38th IEEE conference on Decision and Control**, Phoenix, AZ, U.S.A, December 7-11, 1999, pp. 1368-1372.
  20. Ramirez A., Sriskandarajah, C. and Benhabib, B. "Control of Flexible-Manufacturing Workcells Using Extended Moore Automata", **IEEE International Conference on Robotics and Automation (ICRA'99)**, Detroit, MI, U.S.A, May 1999, pp. 120-125.
  21. Ramirez A., Zhu, S.C., Sriskandarajah, C. and Benhabib, B. "Implementation of Extended Moore Automata for Routing Flexibility in Manufacturing Workcells", **Proceedings of the International Symposium on Robotics and Automation (ISRA)**, Saltillo, Mexico, December 1998, pp. 371-378.
  22. Wagneur, E. and Sriskandarajah, C., "Flowshop Scheduling in the Metal Industry", **Proceedings of the 1998 IEEE Conference on Control Applications**, Congress Center of the Stazione Marittima, Trieste, Italy, September 1-4. 1998, pp. 925-929 (CD).
  23. Yan, H., Lee, C-Y. and Sriskandarajah, C., "Sequencing and Merging Models for Supply Chain Re-engineering", **Proceedings of the Fourth International conference on Optimization : Techniques and Applications**, Curtin University of Technology, Perth, Australia, June 29-30. 1998, pp. 1175-1182.
  24. Bagchi, T.P., Kumar, S. and Sriskandarajah, C., "Lot Streaming Heuristics for the m-Machine No-wait Flowshop", **Proceedings CSME Forum 1998**, Ryerson Polytechnic

- University, Toronto, Canada, May, 1998, Vol 3, pp. 116-122.
25. Yeh D.H.M., Sethi, S.P. and Sriskandarajah, C., "Scheduling of the injection process for golf club head fabrication lines", **Proceedings of the 22nd International conference on Computers and Industrial Engineering**, American University of Cairo, Egypt, December, 1997, pp. 172-175.
  26. Bagchi, T. P., Kumar, S. and Sriskandarajah, C., "Scheduling Heuristic for the m-Machine No-wait Lot streaming Flowshop", Proceedings of the 4th International conference on Computer Integrated Manufacturing, Singapore, October, 1997, pp. 485-493.
  27. Levner, E. Kats, V., and Sriskandarajah, C. "A Geometric Algorithm for Scheduling of Robots", **Proceedings of the International Workshop on Intelligent Scheduling of Robots and Flexible Manufacturing Systems**, Center for Technological Education Holon, Israel, July, 1996, pp. 101-112.
  28. Bagchi, T.P. and Sriskandarajah, C., "A Genetic Algorithm to Minimize Makespan in a Blocking Flowshop", **Proceedings of the first Asia Pacific Decision Sciences Institute Conference**, Hong Kong, June 21-22, 1996, Vol 2, pp. 579-589.
  29. Sriskandarajah, C. and Wagneur, E., "Lot Streaming of a Single Product in Two-machine no-wait Flowshops", **Proceedings of the INRIA/IEEE Conference on Emerging Technologies and Factory Automation ETFA'95**, Paris, France, October 10-13, 1995, Vol III, pp. 427-436.
  30. Wang, Y., Sethi, S.P., Sriskandarajah, C. and Van De Velde, S.L., "Minimizing Makespan in Flowshops with Pallet Requirements: Computational Complexity", **Proceedings of the International Workshop on Intelligent Scheduling of Robots and Flexible Manufacturing Systems**, Center for Technological Education Holon, Israel, July 2, 1995, pp. 105-114.
  31. Logendran, R. and Sriskandarajah, C., "Process of Part Orientation with Single and Multiple Steps Via Mathematical Programming", **Proceedings of the 4th Industrial Engineering Research Conference**, Nashville, TN, U.S.A., May 24-25, 1995, pp. 1101-1106.
  32. Ganesharajah, T. and Sriskandarajah, C., "Survey of Scheduling Research in AGV-served Manufacturing Systems", **Proceedings of the Instrumentation Systems Automation (IAS/95) Technical Conference**, Toronto, Canada, April 25-27, 1995, pp. 87-94.
  33. Wagneur, E. and Sriskandarajah, C., "DEDS with State Dependent Event Durations: Look Ahead Policies and Scheduling", **Proceedings of the 31st IEEE Conference on Decision and Control**, Tucson, Arizona, U.S.A, December 16-18, 1992, pp. 413-418.
  34. Logendran, R. and Sriskandarajah, C., "Group Scheduling Problem in a Flowshop with Blocking", **Proceedings of the International Conference on Manufacturing Automation**, Hong Kong, August 1992, pp. 848-853.
  35. Logendran, R., Ramakrishna, P. and Sriskandarajah, C., "A Higher Level Heuristic for the Selection of Machines and Process Plan in Cellular Manufacturing", **Proceedings of 1992 Summer Computer Simulation Conference**, Reno, Nevada, U.S.A., July 1992, pp. 1103-1107.
  36. Logendran, R., Ramakrishna, P. and Sriskandarajah, C., "Design of Manufacturing Cells via Tabu Search", **Proceedings of the Second International Conference on Flexible Automation and Information Management (FAIM'92)**, Falls Church, VA, U.S.A., June 1992, pp. 633-644.

37. Sriskandarajah, C., "Production Scheduling in Flexible manufacturing Robot Cells", **Proceedings of the International Conference on Productivity '91**, Singapore, August 1991, pp. 535-546.
38. Blazewicz, J., Sethi, S.P. and Sriskandarajah, C., "Scheduling of Robots Moves and Parts in a Robotic Cell", **Proceedings of the Third ORSA/TIMS Special Interest Conference on Flexible Manufacturing Systems: Operations Research Models and Applications**, Boston, U.S.A., August 1989, 8, pp. 281-286.
39. Goyal, S.K. and Sriskandarajah, C., "Scheduling on Two Machines with Wait Dependent Processing Times", **Proceedings of the ASAC 1988 Conference**, Halifax, Nova Scotia, Canada, June 1988, 9, 2, pp. 48-54.
40. Sriskandarajah, C., Ladet, P. and Sethi, S.P., "A Scheduling Method for a Class of Flexible Manufacturing Systems", **Proceedings of the 3rd International Conference on Advances in Production Management Systems (APMS 87)**, Winnipeg, Manitoba, Canada, August 1987, in **Modern Production Management Systems**, (Ed. A. Kusiak), North-Holland, N.Y., 1987, pp. 3-18.
41. Sethi, S.P. and Sriskandarajah, C., "Optimal Selection and Ordering of Part-orienting Devices: Series Configurations", **Proceedings of the 2nd International Conference on Production Systems**, INRIA, Le Chesnay Cedex, France, April 1987, pp. 1-14.

#### **PATENT**

1. Kumar, S., Ramanan, N. and Sriskandarajah, C., "Robotic system control", April 29, (2003), US Patent No. 6,556,893.

#### **REFEREED ABSTRACT**

1. Kumar, S., Ramanan, N. and Sriskandarajah, C., "Maximize Throughput in Large Robotic Cells at FSI", **Interface**, (2002), 32, 5, pp. 83-84.

#### **Software Package:**

**RollSched** software package developed for maintenance scheduling: implemented at the Hong Kong Mass Transit Corporation, 1997.

#### **PAPERS PRESENTED IN CONFERENCES**

1. Sriskandarajah, C. "Sequencing and Scheduling in Robotic Cells," **Key note address, ORSI-2010-ORURD**, Madurai, India, December 15-17, 2010.
2. Sriskandarajah, C. Sushil, G. and Manoj, U.V., "Heuristic Algorithms for Scheduling Problems in Two-stage Supply Chain," **IIE Annual Conference & Exposition** (Invited paper), Florida, USA, May 20-24, 2006.
3. Neil Geismar, H., Dawande, M., and Sriskandarajah, C., "Approximation Algorithms to Optimal  $k$ -unit Cycles for Dual Gripper Robotic Cells ", **International Conference on Management Sciences: Optimization Models & Applications** (Invited paper, Session Chair), Dallas, TX, U.S.A, May 20-22, 2006.

4. Arkali, G., Dawande, M., and Sriskandarajah, C., "Scheduling Support-times for Satellites with Overlapping Visibilities", **International Conference on Management Sciences: Optimization Models & Applications** (Invited paper), Dallas, TX, U.S.A, May 20-22, 2006.
5. Manoj, U.V., Sushil, G., and Sriskandarajah, C., "Supply Chain Distribution Logistics to Minimize Inventory Holding Cost with Dominant Upstream Partner", **International Conference on Management Sciences: Optimization Models & Applications** (Invited paper), Dallas, TX, U.S.A, May 20-22, 2006.
6. Naranpanawe, S., Dawande, M., Gupta, R., and Sriskandarajah, C., "A Traffic Grooming Algorithm for Wavelength-Routed Optical Networks", **International Conference on Management Sciences: Optimization Models & Applications** (Invited paper), Dallas, TX, U.S.A, May 20-22, 2006.
7. Manoj, U.V., Gupta, S. and Sriskandarajah, C., "Supply Chain Distribution Logistics to Minimize Inventory Holding Cost with Dominant Upstream Partner," **INFORMS Annual Meeting** (Invited paper), Pittsburgh, November 5-8, 2006.
8. Arkali, G., Dawande, M. and Sriskandarajah, C., "Scheduling Support-Times for Satellites with Overlapping Visibilities," **INFORMS Annual Meeting** (Invited paper), Pittsburgh, November 5-8, 2006.
9. Geismar, N., Pinedo, M. and Sriskandarajah, C., "Robotic Cells with Parallel Machines and Multiple Dual Gripper Robots," **INFORMS Annual Meeting** (Invited paper), Pittsburgh, November 5-8, 2006.
10. Geismar, H.N., Dewande, M. and Sriskandarajah, C., "Approximations to Optimal  $k$ -unit cycles for Dual gripper Robotic Cells," **MISTA Conference** (Invited paper), New York, USA, July 17-21, 2005.
11. Gupta, J.N.D., Gupta, S. and Sriskandarajah, C., "Supply Chain Scheduling: Just-in-Time Environment", **35th Annual Meeting of Decision Sciences Institute** (Invited paper), Boston, USA, November 20-23, 2004.
12. Neil Geismar, H., Dawande, M., Hall, N.G. and Sriskandarajah, C., "Supply Chain Scheduling: Distribution Systems", **INFORMS** (Invited paper), Denver, USA, October 24-27, 2004.
13. Sriskandarajah, C., Neil Geismar, H., Sethi, S.P. and Sidney, J.B., "Productivity Gains in Flexible Robotic Cells", **CORS-INFORMS International Meeting 2004** (Invited paper), Baff, Canada, May 16-19, 2004.
14. Neil Geismar, H., Lei, L. and Sriskandarajah, C., "The Integrated Production and Transportation Scheduling Problem for a Product with a Short Life Span and Non-Instantaneous Transportation Time." **INFORMS** (Invited paper), Atlanta, October 19-22, 2003.
15. Neil Geismar, H., Sriskandarajah, C. and Ramanan, N., "Increasing Throughput in Robotic Cells with Parallel Machines and Multiple Robots." **INFORMS** (Invited paper), Atlanta, October 19-22, 2003.
16. Gupta, R., Naranpanawa, S. and Sriskandarajah, C., "A Heuristic Technique for Traffic Grooming Traffic in Optical Network" **INFORMS** (Invited paper), Atlanta, October 19-22, 2003.
17. Dawande, M., Neil Geismar, H. and Sriskandarajah, C., "Approximation Algorithms for  $k$ -unit Cyclic Solutions in Robotic Cells ", **POMS 2003** (Invited paper, Session Chair), Savannah, GA, U.S.A, April 4-7, 2003.

18. Neil Geismar, H., Dawande, M. and Sriskandarajah, C., "Scheduling Robotic Cells Having Parallel Machines", **POMS 2003** (Invited paper, Session Chair), Savannah, GA, U.S.A., April 4-7, 2003.
19. Bagchgi, T. P., Naranpanawe, S. and Sriskandarajah, C., "A Flowshop Scheduling Problem with Blocking", **International Conference on Operations Research for Development, ICORD-2002**, Chennai, India, December 27-30, 2002.
20. Neil Geismar, H., Dawande, M. and Sriskandarajah, C., "Robotic Cells with Parallel Machines: Throughput Maximization in Constant Travel-Time Cells." **INFORMS**, San Jose, November 16-19, 2002.
21. Sriskandarajah, C., Drobouchevitch, I., Sethi, S.P. and Chandrasekaran, R., "Scheduling Dual Gripper Robotic Cells Producing Multiple Parts", **44th Annual Conference of the Canadian Operational Research Society (CORS)**, Toronto, Canada, June 3-5, 2002.
22. Logendran, R., and Sriskandarajah, C., "Minimizing the Total Completion Time in a Two-Machine Group Scheduling Problem with Carryover Sequence Dependency", **NSF Design, Service and Manufacturing Grantee & Research Conference**, Shan Juan, Puerto Rico, January 7-10, 2002.
23. Sriskandarajah C., Dawande, M. and Kumar, S., "Fast Algorithms for Scheduling Advertisements on a Web Page," **INFORMS** (Invited paper, Session Chair), Hawaii, U.S.A., June 17-20, 2001.
24. Yan, H., Sriskandarajah, C. and Sethi, S.P., "Re-Engineering Manufacturing Logistics: Sequencing and Merging Operations", **POMS 2001** (Invited paper, Session Chair), Orlando, FL, U.S.A, March 30- April 2, 2001.
25. Drobouchevitch, I., Sethi, S.P., Sidney, J.B. and Sriskandarajah, C. "Scheduling Multiple Parts in Two-Machine Dual Gripper Robotic Cells: Heuristic Algorithm and Performance Guarantee", **POMS 2001** (Invited paper), Orlando, FL, U.S.A, March 30- April 2, 2001.
26. Sriskandarajah, C., Sethi, S.P. and Sidney, J.B., "Scheduling in Dual Gripper Robotic Cells for Productivity Gains," **INFORMS** (Invited paper), San Antonio, TX, U.S.A., November 5-8, 2000.
27. Sriskandarajah, C., "Research Opportunities in Scheduling Theory and Applications," **INFORMS** (Invited panel), San Antonio, TX, U.S.A., November 5-8, 2000.
28. Sriskandarajah, C., Sidney, J.B. and Sethi, S.P., "Scheduling Dual Gripper Robotic Cells for Gaining Productivity", **INFORMS** (Invited paper), Salt Lake City, U.S.A, May 7-10, 2000.
29. Sriskandarajah, C. and Sethi, S.P., "Scheduling Parts in a Robotic Cell Served by a Dual Gripper Robot", **The 11th Annual Meeting of the Production and Operations Management Society**, San Antonio, TX., U.S.A, April 1-4, 2000.
30. Sethi, S.P., Sidney, J.B. and Sriskandarajah, C., " Cycle Time Comparison of a Variety of Robotic Cells", **INFORMS** (Invited paper), Philadelphia, U.S.A, November 7-10, 1999.
31. C. Sriskandarajah, Sidney, J.B. and Sethi, S.P., " Cycle Time Comparison of a Variety of Robotic Cells", **Optimization Days** (Invited paper), Montreal, Canada, May 10-12, 1999.
32. Esignani, S., Hall, N.G. and Sriskandarajah, C., "Lot Streaming and Scheduling in Two Machine No-wait Openshops", **INFORMS** (Invited paper), Cincinnati, U.S.A, May 2-5, 1999.
33. Yeh D.H.M., Sethi, S.P. and Sriskandarajah, C., "Scheduling of the injection process for

- golf club head fabrication lines”, **The 10th Annual Meeting of the Production and Operations Management Society**, Charleston, S.C., U.S.A, March 20-23, 1999.
34. Bagchi, T.P., Kumar, S. and Sriskandarajah, C., “Lot Streaming Heuristics for the m-Machine No-wait Flowshop”, **CSME Forum 1998**, Ryerson Polytechnic University, Toronto, Canada, May 19-22, 1998.
  35. Sidney, J. B. and Sriskandarajah, C., “Minimizing Makespan for Flowshop Scheduling with Target Intervals : A Heuristic”, **CORS/INFORMS** (Invited paper), Montreal, Canada, April 26-29, 1998.
  36. C. Sriskandarajah and Wagneur, E., “Algorithms for Lot Streaming and Scheduling Multiple Products in 2-Machine No-Wait Flowshops”, **CORS/INFORMS** (Invited paper), Montreal, Canada, April 26-29, 1998.
  37. C. Sriskandarajah, Jardine, A.K.S and Chan, C.K., “Maintenance Scheduling of Rolling Stock Using a Genetic Algorithm”, **CORS/INFORMS** (Finalist for CORS Practice Prize), Montreal, Canada, April 26-29, 1998.
  38. Yeh D.H.M., Sethi, S.P. and Sriskandarajah, C., “Scheduling of the injection process for golf club head fabrication lines”, **The 22nd International conference on Computers and Industrial Engineering**, Cairo, Egypt, December 20-22, 1997.
  39. Sriskandarajah, C. and Jardine, A.K.S., “Maintenance Scheduling of Rolling Stocks Using a Genetic Algorithm”, **CORS/97 Conference**, Ottawa, Canada, May 26-28, 1997.
  40. Ganesharajah, T. and Sriskandarajah, C., “Heuristics for Decomposing AGV-served Flowshops”, **First International Conference on Operations and Quantitative Management** (Invited paper), Jaipur, India, January 5-8, 1997.
  41. Sriskandarajah, C. and Bagchi, T., “Minimizing Makespan in a Blocking Flowshop using Genetic Algorithms”, **Optimization Days** (Invited paper), Montreal, Canada, May 13-15, 1996.
  42. Asef-Vaziri, A. and Sriskandarajah, C., “A Loop Material Flow System Design for Automated Guided Vehicles”, **INFORMS** (Invited paper), New Orleans, U.S.A., October 29-November 1, 1995.
  43. Sriskandarajah, C., Hall, N.G., Kamoun, H. and Wan, H., “Scheduling Large Robotic cells”, **INFORMS** (Invited paper), New Orleans, U.S.A., October 29-November 1, 1995.
  44. Hall, N.G. and Sriskandarajah, C., “Scheduling in Robotic cells”, **TIMS/ORSA** (Tutorial, Invited Session), Detroit, U.S.A., October 23-26, 1994.
  45. Sriskandarajah, C. and Ganesharajah, T., “Part Scheduling in an AGV-employed Flowshop”, **Optimization Days** (Invited paper), Montreal, Canada, May 30-June 1, 1994.
  46. Sriskandarajah, C. and Ganesharajah, T., “Part Scheduling in an AGV-employed Flowshop”, **TIMS/ORSA** (Invited paper), Boston, U.S.A., April 24-27, 1994.
  47. Sriskandarajah, C., Kamoun, H. and Hall, N.G., “Scheduling in a Robotic Cell: Algorithms and Complexity”, **TIMS/ORSA**, Chicago, U.S.A., May 16-19, 1993.
  48. Logendran, R. and Sriskandarajah, C., “Group Scheduling Problem in a Flowshop with Blocking”, **International Conference on Manufacturing Automation**, Hong Kong, August 10-12, 1992.
  49. Sriskandarajah, C. and Kamoun, H., “The Complexity of Cyclic Scheduling Problems”, **EURO XII/TIMS XXXI Joint International Conference**, Helsinki, Finland, June 29 - July 1, 1992.

50. Logendran, R. and Sriskandarajah, C., "A Multi-Stage Group Scheduling Problem with Blocking and Anticipatory Setups", **CORS/92 Conference**, Toronto, Canada, June 1-3, 1992.
51. Sriskandarajah, C., "Planning and Scheduling of Parts and Robot Activities in Flexible Manufacturing Robot Cells", **Optimization Days** (Invited paper), Montreal, Canada, May 4-6, 1992.
52. Hall, N.G. and Sriskandarajah, C., "Machine Scheduling Problems with No-wait in Process", **Optimization Days**, Montreal, Canada, May 4-6, 1992.
53. Hall, N.G. and Sriskandarajah, C., "Machine Scheduling Problems with No-wait in Process", **TIMS/ORSA**, Orlando, U.S.A., April 26-29, 1992.
54. Sriskandarajah, C., "Production Scheduling in Flexible Manufacturing Robot Cells", **International Conference on Productivity '91**, Singapore, August 14-16, 1991.
55. Sriskandarajah, C., "Production Scheduling in a Robot-Centered Flexible Manufacturing Cell", **TIMS XXX-SOBRAPO XXIII Joint International Meeting**, Rio de Janeiro, Brazil, July 15-17, 1991.
56. Sriskandarajah, C., "Sequencing of Parts and Robot Activities in a Two Machine Robotic Cell", **TIMS/ORSA**, Nashville, U.S.A., May 12-15, 1991.
57. Sriskandarajah, C., "Performance of Scheduling Algorithms for No-Wait Flowshops with Parallel Machines", **CORS/90 National Conference**, Ottawa, Canada, May 22-24, 1990.
58. Lou, S. and Sriskandarajah, C., "Cyclic Scheduling Problems in a Two Machine Openshop", **CORS/90 National Conference**, Ottawa, Canada, May 22-24, 1990.
59. Sriskandarajah, C., "Performance of Scheduling Algorithms for No-Wait Flowshops with Parallel Machines", **TIMS/ORSA**, Las Vegas, U.S.A., May 7-9, 1990.
60. Jaumard, B., Roussiare, E. and Sriskandarajah, C., "Comparison of Heuristics for Machine-Part Grouping Technology Problems", **Optimization Days**, Montreal, Canada, May 3-4, 1990.
61. Blazewicz, J., Sethi, S.P. and Sriskandarajah, C., "Scheduling of Robot Moves and Parts in a Robotic Cell", **The Third ORSA/TIMS Special Interest Conference on Flexible Manufacturing Systems**, Boston, U.S.A., August 14-16, 1989.
62. Lou, S., Sethi, S.P. and Sriskandarajah, C., "Selection of Part-Orienting Devices in FMS", **TIMS/ORSA**, Vancouver, Canada, May 8-10, 1989.
63. Sriskandarajah, C. and Wagneur, E., "The Two Processor Flowshop with State Dependent Processing Times is NP-Hard", **TIMS/ORSA**, Vancouver, Canada, May 8-10, 1989.
64. Sriskandarajah, C. and Zaras, K., "Openshop Scheduling : a Survey", **Optimization Days**, Montreal, Canada, May 4-5, 1989.
65. Sriskandarajah, C., "Production Scheduling: Complexity and Approximate Algorithms", (Invited research review), **EURO IX/TIMS XXVIII**, Paris, France, July 6-8, 1988.
66. Sriskandarajah, C. and Sethi, S.P., "Performance of Scheduling Algorithms for Flexible Flowshops", (Invited Paper), **EURO IX/TIMS XXVIII**, Paris, France, July 6-8, 1988.
67. Wagneur, E. and Sriskandarajah, C., "Les problèmes d'ordonnancement dans un flow-shop avec retards", **Optimization Days**, Montreal, Canada, May 2-4, 1988.
68. Sriskandarajah, C. and Sethi, S.P., "Scheduling Algorithms for Flexible Flowshop: Average and Worst Case Performance", **TIMS/ORSA**, St-Louis, U.S.A., October 25-28, 1987.

69. Sriskandarajah, C., Ladet, P. and Sethi, S.P., "A Scheduling Method for a Class of Flexible Manufacturing Systems", **3rd International Conference on Advances in Production Management Systems (APMS 87)**, Winnipeg, Manitoba, Canada, August 11-14, 1987.
70. Sriskandarajah, C. and Sethi, S.P., "Performance of Scheduling Algorithms for Flexible Flow Shops", **ASAC Annual Conference**, Toronto, Canada, June 1-3, 1987.
71. Sethi, S.P. and Sriskandarajah, C. and Tayi, G.K., "Optimal Selection and Arrangement of Part-Orienting Devices", **TIMS/ORSA**, New Orleans, U.S.A., May 4-6, 1987.

#### **Invited Talks:**

1. "Novel Operations Problems Arising from Practical Applications," presented at Mays School of Business, Texas A&M University, U.S.A, December 2011.
2. "Sequencing and Scheduling in Robotic Cells," presented at the School of Mechanical and Electrical Engineering, Autonomous University of Nuevo Leon, San Nicolas de los Garza, Monterrey, Mexico, October 18, 2011.
3. "Sequencing and Scheduling in Robotic Cells," presented at the Department of Management Studies, IIT Madras, India, December 3, 2010.
4. "Novel Operations Problems Arising from Practical Applications," presented at C.T. Bauer College of Business, University of Houston, Texas, U.S.A, December 2009.
5. "Supply Chain Scheduling: Just-in-Time Environment," presented at GERAD, Ecole des Hautes Etudes Commerciales (HEC), University of Montreal, Canada, April 2007.
6. "Supply Chain Scheduling: Just-in-Time Environment," presented at Cox School of Business, SMU, Dallas, Texas, U.S.A, November 10, 2005.
7. "Supply Chain Scheduling: Just-in-Time Environment," presented at Robert H. Smith School of Business, University of Maryland, College Park, MD, U.S.A, November 2, 2005.
8. "Algorithms for Scheduling Advertisements on a Web Page," presented at Weatherhead School of Management, Case Western Reserve University, Cleveland, Ohio, U.S.A, October 2002.
9. "Scheduling Problems in Robotic Cells," presented at the College of Business, University of Houston, Texas, U.S.A, March 1999.
10. "Scheduling in Robotic Cells : Heuristic and Cell Design," presented at the School of Management, The University of Texas at Dallas, U.S.A, April 1998.
11. "Merging and Balancing : Manufacturing Logistics Re- Engineering," presented at the Department of Industrial Engineering and Engineering Management, Hong Kong University of Science and Technology, May 1997.
12. "Scheduling Large Robotic Cells," presented at the Department of Industrial and Management Engineering, Indian Institute of Technology, Kanpur, India, January 1997.
13. "Maintenance Scheduling of Rolling Stock using a Genetic Algorithm," presented at the Department of Industrial and Management Engineering, Indian Institute of Technology, Kanpur, India, January 1997.
14. "Scheduling Large Robotic Cells," presented at the Department of Systems Engineering and Engineering Management, The Chinese University of Hong Kong, November 1996.
15. "Maintenance Scheduling for Hong Kong Mass Transit," presented at the Department of Management, The Hong Kong Polytechnic University, November 1996.

16. "Maintenance Scheduling of Rolling Stock using a Genetic Algorithm," presented at the Mass Transit Corporation, Hong Kong, September 1996.
17. "Scheduling Large Robotic Cells," presented at the Department of Automatic Control and Production Systems, Ecole Des Mines de Nantes, Nantes, France, June 1996.
18. "Machine Scheduling Problems with No-wait in Process," presented at the Department of Management Science and Information Systems, Faculty of Business, McMaster University, Canada, April 1992.
19. "Shop Scheduling Problems with No-wait in Process," Faculty of Management, McGill University, Montreal, Canada, January 1992.
20. "Scheduling Parts and Robot Moves in a Robot-Centered Flexible Manufacturing Cell," Industrial Engineering Department, University of Windsor, Canada, October 1991.
21. "Sequencing of Robot Moves and Multiple Parts in a Robotic Cell," Industrial Engineering Department, University of Toronto, Canada, September 1989.
22. "Scheduling of Robot Moves and Parts in a Robotic Cell," presented at the Department of Management Science and Information Systems, Faculty of Business, McMaster University, Hamilton, Canada, March 1989.
23. "Algorithms d'Ordonnancement pour un Atelier du Type Ligne de Transfert Flexible: Evaluation des Performances," (Scheduling Algorithms for Flexible Flowshops: Performance Evaluation). Presented at GERAD, Ecole des Hautes Etudes Commerciales (HEC), University of Montreal, Canada, April 1987.
24. "Optimal Selection and Ordering of Part-Orienting Devices for a Series System," presented at the Department of Industrial Engineering, Technical University of Nova Scotia, Canada, November 1986.
25. "Shops Scheduling Problems: Computational Complexity and Heuristic Algorithms," presented at the Department of Management Science, University of Waterloo, Canada, June 1986.

#### **Visiting Appointments:**

1. **Visiting professor** : Ecole Des Mines de Nantes, Nantes, France, June 1996 (one month).
2. **Senior Research Fellow** : The Hong Kong Polytechnic University, Hong Kong, 15 July 1996 to 31 December 1996.
3. **Senior Research Fellow** : The Chinese University of Hong Kong, Hong Kong, 01 February 1997 to 31 July 1997.

### **III. TEACHING INTERESTS AND EXPERIENCE**

#### **TEACHING INTEREST**

- Operations Management.
- Supply Chain Management.
- Health Care Operations Management.
- Logistic and Distribution Planning.
- Lean/Six-Sigma Process.

- Production Planning and Control.
- Production/Service Scheduling.
- Modeling and Analysis of Manufacturing Systems.
- Optimization Methods.

## **UNDERGRADUATE COURSES TAUGHT**

### **University of Texas at Dallas:**

BA3352 Production Management, Fall Semester, 1998, 1999, 2000 (2), 2002, 2003 (2)

BA3352 Production Management, Spring Semester, 1999 (2), 2000, 2002, 2003

### **University of Toronto:**

MIE468 Facility Planning - Spring Semester, 1998

IND325 Resource and Production Systems - Spring Semesters, 1998, 96, 95

IND307 Fundamentals of Production - Spring Semesters, 1994, 93, 92, 91

IND376 Manufacturing systems - Spring Semester, 1996

IND414 Applications of Management Science - Spring Semester, 1994

IND415 Production Systems - Fall Semesters, 1994, 93, 92, 91, 90

## **GRADUATE COURSES TAUGHT**

### **University of Texas at Dallas:**

OPRE6302 Operations Management- 2004(2), 2006(5), 2007(2), 2008, 2009(2)

HMGT6302 Health Care Operations Management - 2010, 2011

SYSM6314 Manufacturing & Service Systems Planning and Analysis - 2011

OPRE6260 Operations Management- Fall Semesters, 2000, 2001, 2002, 2003

OPRE6260 Operations Management- Spring Semesters, 2001(2), 2002(2), 2003(2), 2004(2)

OPRE6260 Operations Management- Summer 2003

OPRE6260 Operations Management (MIMS) - Summer 2001

OPRE6260 Operations Management (On-line Global MBA) - Fall 2001, Spring 2004

OPRE6361 Production Planning and Control - Fall 1998; Spring 2000, Fall 2002, 2006

OPRE6385 Scheduling - 2001, 2006, 2007, 2009

OPRE6305 Combinatorial Optimization - 2005

OPRE7330 Deterministic Models in Operations Research - Fall 1999

**University of Toronto:**

MIE562 Scheduling - Fall Semester, 1997

IND1125 Group Technology - Spring Semesters, 1992, 91

IND1121 Production and Inventory Control - Fall Semesters, 1993, 92, 91, 90

IND1121 Production Planning and Control - Fall Semesters, 1997,95, 94

MIE1722 Production Planning and Control - Fall Semester, 1998

IND1812 Plant Layout and Materials Handling - Spring Semesters, 1994, 93

IND1104 Modelling and Analysis of Manufacturing Systems - Spring Semester, 1995

**Ecole Polytechnique of Montreal:**

Optimization and Production Scheduling, Spring Semesters, 1990, 89, 88

**Courses Taught for Engineering Continuing Education, University of Toronto:** Special Presentation in Quality Management, Course: Manufacturing-Related Management Systems, Nov. 11-14, 1991, Nov. 16-19, 1992.

**Laboratory Development:**

Coordinator, Manufacturing Systems Laboratory, University of Toronto, 1990-1998: I have developed this laboratory for teaching and research. The development of a flexible robotic cell has been completed. The cell was fully operational and includes two machines (milling machine and lathe), a robot server, and an automated storage and retrieval system (ASRS) as input and output devices. The laboratory contains the robotic cell in which the two decisions (robot move cycle, part sequencing problem) are jointly optimized. The software for the cell is developed by my former Ph.D. student, H.Kamoun, as a result of his and my joint research work. The detailed implementation of the software in the cell is carried out by two undergraduate students (Emil Chan, Daisy Lau). The cell has been successfully used to teach concepts of manufacturing systems (CIM/CAD) in an undergraduate course (IND307 Fundamental of Production, Spring semesters 1992, 1993), providing students with hands on experience in operating an FMS. In the second phase of the laboratory development, we integrated an Automated Storage Retrieval System with the cell.

## SUMMARY OF THESES SUPERVISED

Category	Number of Successfully Completed Theses	Number of Theses in Progress
Ph.D Thesis	11	2
M.Sc Thesis	1	-
MS Project	7	-
BS Project	22	-
PostDoct/Visitor	3	-

## IV. UNIVERSITY AND COMMUNITY SERVICE

**Senate Member**, University of Texas at Dallas, July 2009- June 2010.

**Committee Member**, Masters Program, School of Management, University of Texas at Dallas, July 2002 - to date.

**Committee Member**, Ad-hoc committee chair, 3rd year review of Dr. Jun Zhang, School of Management, University of Texas at Dallas.

**OM Search Committee Member**, School of Management, University of Texas at Dallas, 2008 - 2009.

**IS Search Committee Member**, School of Management, University of Texas at Dallas, 2008 - 2009.

**Committee Member**, CEP Committee, University of Texas at Dallas, July 2007 - August 2009.

**Committee Member**, Ad-hoc committee, 3rd year review, School of Management, University of Texas at Dallas, 2005-2006.

**Committee Member**, Ad-hoc committee, Tenure review, School of Management, University of Texas at Dallas, 2005-2006.

**Committee Member**, Ad-hoc committee, Full Professor review, School of Management, University of Texas at Dallas, 2005-2006.

**Committee Member**, CQ Committee, University of Texas at Dallas, July 2005 - June 2007.

**Personal Committee Member**, University of Texas at Dallas, July 2001- June 2003.

**Senate Member**, University of Texas at Dallas, July 2000- June 2001.

**OM Area Coordinator**, Operations Management (OM) Program, Ph.D. program development in OM, Recruiting and advising Ph.D. students in OM), School of Management, University of Texas at Dallas, July 1998- July 2004.

**OM PhD Coordinator**, Operations Management (OM) Program, Ph.D. program development in OM, Recruiting and advising Ph.D. students in OM), School of Management, University of Texas at Dallas, July 2005- July 2010.

**Committee Member**, Masters Program, School of Management, University of Texas at Dallas, July 2000 - June 2001.

**Search Committee Member**, Recruiting in Operations Management area, School of Management, University of Texas at Dallas, August 1999 - June 2000, August 2002 - June 2004.

**Search Committee Member**, Recruiting in Information Systems area, School of Management, University of Texas at Dallas, August 1999 - June 2000.

**Committee Member**, Academic Policy and Planning, School of Management, University of Texas at Dallas, July 1998- June 2001.

**Member**, Intellectual Contributions Committee (AACSB sub-committee), School of Management, University of Texas at Dallas, 1999-2000.

**Coordinator**, Manufacturing Systems Laboratory, University of Toronto, July 1990- June 1998.

**Member of the Tenure Committee** (V.Makis), University of Toronto, March 1998.

**Member of the Reading Evaluation (Research) Committee** (V.Makis), University of Toronto, March 1998.

**Associate Chair of Graduate Studies**, Department of Industrial Engineering, University of Toronto, November 1994- December 1995.

**Coordinator**, Operations Research/Management Science Group, University of Toronto, July 1994- November 1994.

**Member of Task Force on the merger of Mechanical and Industrial Engineering Departments**, University of Toronto, 1994-1995.

**Member of Task Force on the merger of Graduate units of Mechanical and Industrial Engineering Departments**, University of Toronto, 1995-1996.

**Faculty Advisor:** Canadian Society of Industrial Engineers (CSIE), Student Chapter, University of Toronto, 1990- 1994, Helped to organize 13th Annual C.S.I.E. Student Conference (1993), Toronto. I received a Dean's special merit award in recognition of my outstanding commitment towards our undergraduate student chapter of the CSIE.

**Member of Task Force on Mathematical Sciences**, University of Toronto, 1994-1995.

**Member of a Committee for the appointment of the Chair of First Year,** University of Toronto 1993.

**Member of a Steering Committee,** to advise on the planning of a Seminar on “Advances in Material Warehouse Handling” for the Continuing Engineering Education Program, University of Toronto 1993.

**Member of a Department Strategic Planning Steering Committee,** University of Toronto 1994.

**Member of Strategic Planning Group,** Undergraduate and Graduate Program Formats and Practices, Faculty of Engineering, University of Toronto 1994.

**Seminar Coordinator,** Department of Industrial Engineering, University of Toronto, 1990-1992.

**Member of Work Load Committee,** Department of Industrial Engineering, University of Toronto, 1994-1995.

**Member of Space Committee,** Department of Industrial Engineering, University of Toronto, 1991-1996.

**Member of Task Force on Undergraduate Curriculum Review,** Department of Industrial Engineering, University of Toronto, 1992-1996.

**Member of Search Committee,** Department of Industrial Engineering, University of Toronto, 1992-1993.