

CURRICULUM VITAE

of

ZHI-LONG CHEN

Tenured Full Professor

Department Chair

Department of Decision, Operations, & Information Technologies

Robert H. Smith School of Business

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1. BACKGROUND

1.1. Education Background

Ph.D., Operations Research, 1997

Princeton University (Princeton, NJ)

Department of Civil Engineering & Operations Research

(Thesis Advisor: Professor Warren B. Powell)

M.A., Operations Research, 1995

Princeton University

Department of Civil Engineering & Operations Research

M.S., Operations Research, 1991

Fudan University (Shanghai, China)

Department of Statistics & Operations Research

B.S., Operations Research, 1988

Fudan University

Department of Statistics & Operations Research

1.2. Positions Held/Employment History

Department of Decision, Operations & Information Technologies, Robert H. Smith School of Business, University of Maryland, College Park, MD

August 2009 – Present: *Full Professor of Operations Management & Management Science*

July 2010 – Present: *Department Chair*

January 2009 – June 2010: *Associate Department Chair*

August 2003 – August 2009: *Tenured Associate Professor of Operations Management*

August 2001 – July 2003: *Assistant Professor of Management Science*

JDA Software, Inc., Rockville, MD

January 2008 – June 2008, Sabbatical work

Department of Systems Engineering, University of Pennsylvania, Philadelphia, PA

August 1997 – June 2001: *Assistant Professor of Systems Engineering*

Shanghai Transportation Planning Institute, Shanghai, China

July 1991 – June 1993: *Engineer*

2. RESEARCH

2.1. Research Interests

Applications: (1) Supply chain operations (supply chain scheduling, integrated production and distribution operations); (2) Transportation and logistics (practical and real-time vehicle routing, container vessel scheduling); (3) Capacity planning, production planning & scheduling; (4) Pricing (markdown pricing, pricing-production decisions).

Methodologies: Combinatorial optimization; Integer programming; Dynamic programming; Stochastic optimization; Heuristics and performance analysis

2.2. Research Grants Received

- (9) Principal Investigator, **University of Maryland Graduate Research Board**, Project Title: “The coordination of pricing and scheduling decisions”, Amount: \$8,750, Summer, 2007.
- (8) Principal Investigator, **National Science Foundation**, Grant Number: DMI-0421637, Project Title: “Collaborative Research: Supply Chain Scheduling”, Amount: \$150,000, October 2004 – September 2007. (In collaboration with another PI of the project: Nicholas Hall of Ohio State University)
- (7) Principal Investigator, **University of Maryland Graduate Research Board**, Project Title: “Integrated Supply Chain Management: Scheduling Integration of Production and Distribution Operations”, Amount: \$8,750, Summer, 2005.
- (6) Principal Investigator, **National Science Foundation**, Grant Number: DMI-9988427, Project Title: “Effective Logistics Management: Integrated Scheduling of Job Processing and Job Delivery”, Amount: \$250,840, September 2000 – August 2004.
- (5) Co-Principal Investigator, **National Science Foundation**, Grant Number: CMS-0085658, Project Title: “Capacity and Flexibility Assessment of Transportation Infrastructure Systems”, Amount: \$115,000, September 2000 – August 2002. (In collaboration with the PI of the project: Edward Morlok of University of Pennsylvania)
- (4) Co-Principal Investigator, **University Research Foundation Award** (University of Pennsylvania), Project Title: “Matching Funds for New Industry-Government-Academic Research Programs in Logistics & Transportation”, Amount: \$6,000. 2000 – 2001. (In collaboration with other PIs: Edward Morlok, Bruce Allen, and Chun-Hung Chen of University of Pennsylvania)
- (3) Principal Investigator, Received Transportation Management Software Package (Worth \$2 Million) from **Manugistics, Inc.** as a gift, for a joint project “Collaborative Projects between Department of Systems Engineering of University of Pennsylvania and Manugistics, Inc.”, 1999 – 2001. The software was installed at University of Pennsylvania’s Transportation & Logistics Lab, and was used for several courses. (In collaboration with Edward Morlok of University of Pennsylvania)
- (2) Principal Investigator, **University Research Foundation Award** (University of Pennsylvania), Project Title: “Integrated Production-Distribution Planning”, Amount: \$12,000. 1998 – 1999.
- (1) Principal Investigator, **University Research Foundation Award** (University of Pennsylvania), Project Title: “System-Wide Planning: Coordination of Production and Distribution”, Amount: \$12,000. 1997 – 1998

2.3. Research Publications

Summary:

- 45 journal papers published or accepted.
- 1 edited book and 3 book chapters published.

- 2 journal papers under review.
- As of May 2010, Total 1200 citations based on Google Scholar.
- My citation H-index was ranked #36 among more than 1300 MS/POM professors in business schools in the US based on papers published since 1985, according to a recent article by B. Jiang, “How to do research: Advice from stellar scholars in the MS/POM field”, Department of Management, Kellstadt Graduate School of Business, DePaul University, published online at the Operations and Supply Chain Management Forum of the Journal of Operations Management, available at: <http://nebula.bus.msu.edu/jom/osm.asp>.

A. Refereed Journal Papers – Under Review

- [47] S. Li, Z.-L. Chen, and G. Tang, Optimality proof of the Kise-Ibaraki-Mine algorithm. Under 2nd round of review, *Journal of Scheduling*.
- [46] M. Chen, Z.-L. Chen, G. Pundoor, S. Acharya, and J. Yi, Integrated inventory allocation and markdown pricing at multiple stores. Under 2nd round of review, *Production and Operations Management*, Special Issue on Retail Operations.

B. Referred Journal Papers - Published or Accepted

- [45] S.-L. Li, Z.-L. Chen, and G. Tang, A Note on the optimality proof of the Kise-Ibaraki-Mine algorithm. *Operations Research*. 58 (2010), 508 – 509.
- [44] G. Tang, F. Chen, T.C.E. Cheng, C.T. Ng, and Z.-L. Chen, The loader problem: Formulation, complexity and algorithms. *Journal of the Operational Research Society*, 61 (2010), 840 – 848.
- [43] Z.-L. Chen, Integrated production and outbound distribution scheduling: Review and extensions. *Operations Research*. 58 (2010), 130 – 148. (# of citations = 11)
- [42] W. Zhong, Z.-L. Chen, and M. Chen, Integrated production and distribution scheduling with committed delivery dates. *Operations Research Letters*. 38 (2010), 133 – 138.
- [41] Z.-L. Chen, and N.G. Hall, The coordination of pricing and scheduling decisions. *Manufacturing & Service Operations Management*. 12 (2010), 77 – 92. (# of citations = 1)
- [40] Z.-L. Chen, and G. Pundoor, Integrated order scheduling and packing. *Production and Operations Management*, 18 (2009), 672 – 692. (# of citations = 1)
- [39] G. Pundoor and Z.-L. Chen, Joint cyclic production and delivery scheduling in a two-stage supply chain. *International Journal of Production Economics*. 119 (2009), 55 – 74.
- [38] Z.-L. Chen, and C.-L. Li, Scheduling with subcontracting options. *IIE Transactions*. 40 (2008), 1171 - 1184. (# of citations = 8)
- [37] Z.-L. Chen, and N.G. Hall, Maximum profit scheduling. *Manufacturing & Service Operations Management*. 10 (2008), 84 – 107. (# of citations = 1)
- [36] Z.-L. Chen, and N.G. Hall, Supply chain scheduling: Conflict and cooperation in assembly systems. *Operations Research*, 55 (2007), 1072 – 1089. (# of citations = 20)
- [35] Z.-L. Chen, L. Lei, and H. Zhong, Container vessel scheduling with bi-directional flows. *Operations Research Letters*. 35 (2007), 186 – 194. (# of citations = 5)
- [34] Z.-L. Chen, and G. Pundoor, Order assignment and scheduling in a supply chain. *Operations Research*. 54 (2006), 555 – 572. (# of citations = 22)
- [33] Z.-L. Chen, and H. Xu, Dynamic column generation for dynamic vehicle routing with time windows. *Transportation Science*, 40 (2006), 74 - 88. (# of citations = 16)

- [32] C.-L. Li and Z.-L. Chen, Bin packing problem with concave costs of bin utilization. *Naval Research Logistics*, 53 (2006), 298 - 308. (# of citations = 5)
- [31] G. Pundoor, and Z.-L. Chen, Scheduling a production-distribution system to optimize the tradeoff between delivery tardiness and distribution cost. *Naval Research Logistics*, 52 (2005) 571 – 589. (# of citations = 22)
- [30] Z.-L. Chen, and G. Vairaktarakis, Integrated scheduling of production and distribution operations. *Management Science*, 51 (2005), 614 – 628. (# of citations = 67)
- [29] Z.-L. Chen, Simultaneous job scheduling and resource allocation on parallel machines. *Annals of Operations Research*, 129 (2004), 135 – 153. (# of citations = 32)
- [28] H. Xu, Z.-L. Chen, and S. Rajagopal, Solving a practical pickup and delivery problem. *Transportation Science*, 37 (2003), 347 – 364. (# of citations = 87)
- [27] Z.-L. Chen, and C.-Y. Lee, Scheduling of depalletizing and truck loading operations in a food distribution system. *Naval Research Logistics*, 50 (2003), 239–256. (# of citations = 3)
- [26] Z.-L. Chen, and W.B. Powell, Exact algorithms for scheduling multiple families of jobs on parallel machines. *Naval Research Logistics*, 50 (2003), 823-840. (# of citations = 19)
- [25] Z.-L. Chen, S. Li, and D. Tirupati, A scenario based stochastic programming approach for technology and capacity planning. *Computers and Operations Research*, 29 (2002), 781-806. (# of citations = 43)
- [24] T.C.E. Cheng, Z.-L. Chen, and N.V. Shakhlevich, Common due date assignment and scheduling with ready times. *Computers and Operations Research*, 29 (2002), 1957-1967. (# of citations = 15)
- [23] Z.-L. Chen and C.-Y. Lee, Parallel machine scheduling with a common due window. *European Journal of Operational Research*, 136 (2002), 512-527. (# of citations = 37)
- [22] C.-Y. Lee and Z.-L. Chen, Machine scheduling with transportation considerations, *Journal of Scheduling*, 4 (2001), 3-24. (# of citations = 108)
- [21] F. Zhang, G. Tang, and Z.-L. Chen, A $3/2$ -approximation algorithm for parallel machine scheduling with controllable processing times. *Operations Research Letters*, 29 (2001), 41-47. (# of citations = 17)
- [20] C.-Y. Lee and Z.-L. Chen, Scheduling of jobs and maintenance activities on parallel machines, *Naval Research Logistics*, 47 (2000), 145-165. (# of citations = 79)
- [19] Z.-L. Chen and W.B. Powell, Solving parallel machine scheduling problems by column generation, *INFORMS Journal on Computing*, 11 (1999), 78-94. (# of citations = 87)
- [18] Z.-L. Chen and W.B. Powell, Convergent cutting-plane and partial-sampling algorithm for multistage stochastic linear programs with recourse, *Journal of Optimization Theory and Applications*, 102 (1999), 497-524. (# of citations = 27)
- [17] Z.-L. Chen and W.B. Powell, A column generation based decomposition algorithm for a parallel machine just-in-time scheduling problem, *European Journal of Operational Research*, 116 (1999), 221-233. (# of citations = 51)
- [16] Z.-L. Chen, Solution algorithms for the parallel replacement problem under economy of scale, *Naval Research Logistics*, 45 (1998), 279-295. (# of citations = 15)
- [15] T.C.E. Cheng, Z.-L. Chen, C.-L. Li and B.M.T. Lin, Scheduling to minimize the total compression and late costs, *Naval Research Logistics*, 45 (1998), 67-82. (# of citations = 11)
- [14] Z.-L. Chen and W.B. Powell, A note on Bertsekas' small-label-first strategy, *Networks*, 29 (1997), 111-116.

- [13] Z.-L. Chen, Q. Lu and G. Tang, Single machine scheduling with discretely controllable processing times, *Operations Research Letters*, 21 (1997), 69-76. (# of citations = 37)
- [12] Z.-L. Chen, Scheduling with batch setup times and earliness-tardiness penalties, *European Journal of Operational Research*, 96 (1997), 518-537. (# of citations = 21)
- [11] T.C.E. Cheng, Z.-L. Chen, M.Y. Kovalyov and B.M.T. Lin, Parallel-machine batching and scheduling to minimize total completion time, *IIE Transactions*, 28 (1996), 953-956. (# of citations = 30)
- [10] T.C.E. Cheng, Z.-L. Chen and C.-L. Li, Parallel machine scheduling with controllable processing times, *IIE Transactions*, 28 (1996), 177-180. (# of citations = 27)
- [9] Z.-L. Chen, Parallel machine scheduling with time dependent processing times, *Discrete Applied Mathematics*, 70 (1996), 177-180. (# of citations = 44)
- [8] Z.-L. Chen, Scheduling and common due date assignment with earliness-tardiness penalties and batch delivery costs, *European Journal of Operational Research*, 93 (1996), 49-60. (# of citations = 55)
- [7] T.C.E. Cheng, Z.-L. Chen and C.-L. Li, Single-machine scheduling with trade-off between number of tardy jobs and resource allocation, *Operations Research Letters*, 19 (1996), 237-242. (# of citations = 10)
- [6] Z.-L. Chen, A note on single-processor scheduling with time dependent execution times, *Operations Research Letters*, 17 (1995), 127-129. (# of citations = 15)
- [5] C.-L. Li, T.C.E. Cheng and Z.-L. Chen, Single-machine scheduling to minimize the weighted number of early and tardy agreeable jobs, *Computers & Operations Research*, 22 (1995), 205-219. (# of citations = 5)
- [4] T.C.E. Cheng and Z.-L. Chen, Parallel machine scheduling with batch setup times, *Operations Research*, 42 (1994), 1171-1174. (# of citations = 24)
- [3] T.C.E. Cheng and Z.-L. Chen, Parallel machine scheduling problems with earliness and tardiness penalties, *Journal of the Operational Research Society*, 45 (1994), 685-695. (# of citations = 63)
- [2] T.C.E. Cheng, Z.-L. Chen and C. Oguz, One-machine batching and sequencing of multiple-type items, *Computers & Operations Research*, 21 (1994), 717-721. (# of citations = 11)
- [1] C.-L. Li, Z.-L. Chen and T.C.E. Cheng, A note on one-processor scheduling with asymmetric earliness and tardiness penalties, *Operations Research Letters*, 13 (1993), 45-48. (# of citations = 11)

C. Book & Book Chapters Published

- Z.-L. Chen, Coordination of production and delivery in supply chain scheduling. In *Wiley Encyclopedia of Operations and Management Science*, 2010.
- Z.-L. Chen, and S. Raghavan, *Tutorials in Operations Research: State-of-the-Art Decision Making Tools in the Information-Intensive Age*. This is an edited book published in conjunction with 2008 INFORMS Annual Meeting in Washington DC, October, 2008.
- Z.-L. Chen, Integrated production and distribution operations: Models, taxonomy, and review, In *Handbook of Quantitative Supply Chain Analysis: Modeling in the E-Business Era*, Edited by D. Simchi-Levi, D. Wu, and Z.-J. Shen, Kluwer Academic Publishers, 2004, pp. 711 – 745.
- W.B. Powell and Z.-L. Chen, A generalized threshold algorithm for the shortest path problem with time windows, in *DIMACS Volume 40 on Network Design: Connectivity and Facility Location*, Pages 303-316, 1997.

W.B. Powell and Z.-L. Chen, An optimal control formulation of large-scale multiclass machine scheduling problems, *Network Optimization*, (Edited by P.M. Pardalos, D. Hearn, and W.W. Hager), Lecture Notes in Economics and Mathematical Systems, Volume 450, Pages 423-440, Springer-Verlag, 1997.

2.4. Invited Talks at Universities and Companies

1. “Integrated production and distribution scheduling with fixed departure dates”, Stern School of Business, New York University, April 2010.
2. “Integrated production and outbound distribution scheduling in a supply chain”, Northeastern University, Shenyang, China, June 2009.
3. “Integrated production and outbound distribution scheduling in a supply chain”, Zhejiang University, Hangzhou, China, June 2009.
4. “Integrated inventory allocation and pricing decisions at multiple stores”, School of Management, Fudan University, Shanghai, China, March 2009.
5. “The coordination of pricing and scheduling decisions”, Cox School of Business, Southern Methodist University, Dallas, TX, January 2008.
6. “Integrated production and outbound distribution scheduling in a supply chain”, Anderson School of Business, University of California, Riverside, CA, February 2008.
7. “Integrated production and distribution scheduling in a supply chain”, Michael G. Foster School of Business, University of Washington, Seattle, November 2007.
8. “Integrated production and distribution scheduling in a supply chain”, Desautels Faculty of Management, McGill University, Canada. November 2007.
9. “The coordination of pricing and production scheduling decisions”, Weatherhead School of Management, Case Western Reserve University. November 2006.
10. “Supply chain scheduling and related topics”, Tongji University, Shanghai, China, July, 2006.
11. “Integrated production and distribution scheduling: Some models and algorithms”, School of Management, University of Texas at Dallas. January 2005.
12. “Prescription drug price optimization”, at Sanofi-Aventis, Inc. NJ, 2005.
13. “Information technology and information sharing in supply chains”, NIST & NSF joint workshop on Intelligent Information Use in Manufacturing, September 2004.
14. “Joint inventory allocation and markdown pricing at multiple stores”, Manugistics, Inc., Rockville, MD, August 2004.
15. “A dynamic scheduling framework”, Department of Logistics, Faculty of Business, Hong Kong Polytechnic University, July 2003.
16. “Issues in real-world vehicle routing and a solution approach”, Department of Manufacturing and Industrial Engineering, Lehigh University. February 2001.
17. “Integrated scheduling of production and distribution operations”, Department of Operations, Weatherhead School of Management, Case Western Reserve University, April 2001.
18. “Integrated scheduling of production and distribution operations”, Department of Management Science, Fisher College of Business, Ohio State University, September 2001.
19. “Integrate scheduling of production and distribution operations”, Department of Decision and Information Technologies, R.H. Smith School of Business, University of Maryland. February 2001.
20. “Integrate scheduling of production and distribution operations”, Department of Information Technologies and Operations Management, Edwin L. Cox School of Business, Southern Methodist University. March 2001.

21. "Integrate scheduling of production and distribution operations", Department of Management Science and Information Systems, Rutgers University. March 2001.
22. "Column generation for solving scheduling problems", School of Management, Shanghai Second Polytechnic University, Shanghai, China, June 2000.
23. "Column generation for solving a pickup and delivery problem", Manugistics, Inc., Wayne, PA, June, 2000.
24. "Capacity planning and technology choice", Kardex Systems, Marietta, Ohio, 1999.
25. "Modeling and solving real-world truck routing problems", National Center for Transportation and Industrial Productivity, and Department of Industrial Engineering, New Jersey Institute of Technology, November 1999.
26. "Solving complex scheduling problems by column generation", Department of Industrial and Manufacturing Systems Engineering, Iowa State University, January 1997.
27. "Stochastic programming for stochastic and dynamic problems", Department of Industrial Engineering, Purdue University, January 1997.
28. "Stochastic programming for stochastic and dynamic planning problems", Department of Industrial Engineering and Operations Research, Columbia University, February 1997.
29. "Stochastic programming for stochastic and dynamic planning problems", Stern School of Business, New York University, February 1997.
30. "Stochastic programming for stochastic and dynamic problems", Department of Industrial Engineering and Management Science, Northwestern University, February 1997.
31. "Stochastic programming for stochastic and dynamic planning problems", Department of Mechanical and Industrial Engineering, University of Illinois, Urbana-Champaign, March 1997.
32. "Stochastic programming for stochastic and dynamic planning problems", Department of Systems Engineering, University of Pennsylvania, March 1997.

2.5. Presentations at Conferences

1. "Dynamic vehicle scheduling using column generation", INFORMS National Conference, Washington, D.C. May 1996.
2. "Solving hard machine scheduling problems by column generation", INFORMS National Conference, Washington, D.C. May 1996.
3. "An optimal control formulation for multiclass machine scheduling problems", INFORMS National Conference, San Diego, May 1997.
4. "A convergent algorithm for multistage stochastic linear programs with recourse", INFORMS National Conference, Montreal, April 1998.
5. "Solving parallel machine scheduling problems with setup times by column generation", INFORMS National Conference, Montreal, 1998.
6. "Simultaneous resource allocation and job scheduling to minimize weighted number of tardy jobs", INFORMS National Conference, Seattle, October 1998.
7. "Column generation for hard machine scheduling problems", INFORMS National Conference, Seattle, October 1998.
8. "A column generation method for multi-machine scheduling", INFORMS National Conference, Cincinnati, May 1999.
9. "Joint decisions on capacity replacement & expansion under economy of scale", INFORMS National Conference, Cincinnati, May 1999.

10. "Technology & capacity planning under uncertainty", INFORMS National Conference, Cincinnati, May 1999.
11. "Column generation for a just-in-time scheduling problem", INFORMS National Conference, Philadelphia, November 1999.
12. "Supply chain scheduling: Assembly systems", INFORMS National Conference, San Antonio, November 2000.
13. "Integrated scheduling of job processing and job delivery", INFORMS National Conference, San Antonio, November 2000.
14. "Vehicle routing with crossdocking", INFORMS National Conference, Miami Beach, November 2001.
15. "Survey of results on integrated scheduling of job processing and job delivery", INFORMS National Conference, Miami Beach, November 2001.
16. "Integrated planning and scheduling of production and distribution operations: A review of models and algorithms", International Conference on Global Supply Chain Management, Beijing, China, August 2002.
17. "A dynamic scheduling framework", INFORMS National Conference, San Jose, November 2002.
18. "Maximum profit scheduling", INFORMS National Conference, Atlanta, GA, October 2003.
19. "Integrated scheduling of production and distribution operations", INFORMS National Conference, Atlanta, GA, October 2003.
20. "Dynamic column generation for dynamic vehicle routing", INFORMS National Conference, Atlanta, GA, October 2003.
21. "Scheduling a production-distribution system to optimize the tradeoff between distribution cost and order tardiness", INFORMS National Conference, Atlanta, GA, October 2003.
22. "Integrated production and distribution operations: A review of models and solution approaches", Supply Chain Management Workshop, Gainesville, FL, February 2004.
23. "Order assignment and scheduling in a supply chain", INFORMS National Conference, Denver, CO, October 2004.
24. "Joint cyclic production and delivery scheduling in a two-stage supply chain", INFORMS National Conference, Denver, CO, October 2004.
25. "Integrated production and distribution operations: A review of models and solution approaches", Supply Chain Management Workshop, Gainesville, FL, February 2005.
26. "Markdown pricing at multiple stores", INFORMS Revenue Management & Pricing Section Conference, MIT, Boston, June 2005.
27. "Scheduling a production-distribution system to optimize the tradeoff between tardiness and total distribution cost", Second MISTA Conference (Multidisciplinary International Conference on Scheduling: Theory and Applications), Stern School of Business, NYU, New York, July 2005.
28. Plenary talk, "Integrated production and distribution scheduling in supply chains", China Scheduling Conference, Shanghai, August 2005.
29. "Survey of production-distribution scheduling models and results", INFORMS National Conference, San Francisco, CA, November 2005.
30. "Integrating order assignment, production, and distribution in a supply chain", INFORMS National Conference, San Francisco, CA, November 2005.
31. "Production-distribution scheduling with unequal order weights", INFORMS National Conference, San Francisco, CA, November 2005.

32. “Bin packing with concave cost of bin utilization”, INFORMS National Conference, San Francisco, CA, November 2005.
33. “Markdown pricing at multiple stores”, INFORMS National Conference, San Francisco, CA, November 2005.
34. Invited tutorial presentation (90 minutes), in the POMS International Conference held in Shanghai, China, “Integrated production and outbound distribution scheduling: A tutorial”, June 2006.
35. “Integrated production and distribution operations”, Supply Chain Management Workshop, Gainesville, FL, February 2006
36. “Scheduling with subcontracting options”, in the INFORMS International Conference held in Hong Kong, June 2006.
37. “Open problems in integrated production-distribution scheduling”, INFORMS Annual Conference, Pittsburgh, PA, November, 2006.
38. “Integrated production and distribution scheduling: Survey and extensions”, INFORMS Annual Conference, Pittsburgh, PA, November, 2006.
39. “Integrating scheduling, and packing for delivery”, INFORMS Annual Conference, Pittsburgh, PA, November, 2006.
40. “Coordinated pricing and production scheduling decisions”, MSOM Annual Conference, Shanghai, China, June, 2007.
41. “Optimality proof of the Kise-Ibaraki-Mine algorithm”, INFORMS Annual Conference, Seattle, November, 2007.
42. “Robust pricing to minimize maximum regret”, INFORMS Annual Conference, Seattle, November, 2007.
43. “Dynamic pricing for selling a fixed amount of inventory: Research overview and future directions”, INFORMS Annual Conference, Seattle, November, 2007.
44. “Integrated production and outbound distribution scheduling in a supply chain: Research overview and future directions”, MSOM Annual Conference, College Park, MD, June 2008.
45. “Integrated production and distribution scheduling with committed delivery dates”, INFORMS Annual Conference, Washington DC, October 2008.
46. “Markdown pricing at multiple retail stores”, Second Annual Conference of OCSAMSE, Shanghai, China, July 2009.
47. Plenary Talk: “Integrated production and outbound distribution scheduling in a supply chain: Research overview and directions for future research”, Eighth International Conference in Information and Management Sciences (IMS 2009), Kunming, China, July 2009.

3. TEACHING

Awards Received:

- Top 15% faculty for MBA core courses, 2002.
- Top 15% faculty for MBA core courses, 2008.

3.1. Courses Taught at University of Pennsylvania (1997 – 2001)

- (1) **SYS304, “*Optimization of Systems*”, Undergraduate Level, University of Pennsylvania**

(2) SYS650, “*Advanced Logistics*”, Graduate Level, University of Pennsylvania

3.2. Courses Taught at Smith School (2001 – present)

(1) BMGT434, “*Introduction to Optimization*”, Undergraduate Level, University of Maryland.

Topics covered: Optimization model formulation, linear programming & sensitivity analysis, what-if-analysis, transportation models, integer programming problems, network problems, project scheduling and cost/time tradeoff. Use Excel Solver.

Enrollment: varies from 25 to 45.

My teaching ratings:

Semester	Out of 5.0
Fall 2001 (Section 0101)	4.77
Fall 2001 (Section 0201)	4.80
Fall 2002	4.57
Fall 2003	4.81
Spring 2004	4.84
Fall 2004	4.69
Fall 2005	4.62
Fall 2006	4.25
Fall 2007	4.44
Fall 2008	4.45
Fall 2009	4.36

(2) BMGT671 / BUSI671, “*Supply Chain Logistics and Operations Management*”, MBA & EMBA Core, University of Maryland.

Topics covered: Supply chain strategies, network design, inventory management, risk pooling, product design for supply chain, postponement, bullwhip effect, value of information in the supply chain, distribution strategies, strategic alliances, supply contracts, issues in international supply chains, E-business and supply chain, IT for supply chain, RFID. Covers 5 cases: Scottish Brewers, Sport Obermeyer, Barilla SpA, HP DeskJet Printer Supply Chain, Mattel, Inc.

Enrollment: varies from 50 to 65 for full-time and part-time classes and about 30 students in the EMBA class.

My teaching ratings:

Semester	Out of 5.0
Spring 2002 (Full-time program)	4.10
Fall 2002* (Part-time, DC01)	4.38
Fall 2002* (Part-time, DC02)	4.48
Fall 2003 (Part-time, DC03)	3.98
Fall 2004 (Part-time, GS01)	4.18
Summer 2005 (EMBA, Beijing)	4.80
Fall 2005 (part-time, DC01)	4.09
Fall 2005 (part-time, GS01)	4.20
Fall 2006 (part-time, GS01)	4.14
Fall 2007* (part-time, GS01)	4.56

*For those sections, officially recognized as “Top 15%” faculty teaching MBA core courses.

(3) BUDT 724, “Operations Management”, MBA Elective & EMBA, University of Maryland.

Topics covered: Operations strategies, product development, process design, process flowchart, bottleneck, strategic capacity planning, facility layout, aggregate planning, waiting line models, demand forecasting, quality management, project management, pricing and revenue management, supplier management. Covers the following cases: National Cranberry Cooperative, Longxi Machinery Works (A, B, C), American Airlines Inc.: Revenue Management, Product Development at Dell Corporation.

Enrollment: Varies from 15 to 30.

My teaching ratings:

Semester	Out of 5.0
Spring 2004 (Part-time, DC01)	3.62
Fall 2006 (EMBA, Beijing)	4.65
Fall 2006 (EMBA, Shanghai)	4.28
Fall 2007 (EMBA, Shanghai)	4.21

(4) BUSI 634, “Operations Management”, MBA Core, University of Maryland. This is a new core started in the summer 2008 in the part-time program. *I am the first one who taught this course in the part-time program.*

Topics covered: Operations strategies, product development, process design, process flowchart, bottleneck, batch operations, EOQ model, strategic capacity planning, aggregate planning, waiting line models, quality management, Toyota production system and lean management, newsvendor model. Covers the following cases: National Cranberry Cooperative, Quinte MRI, Virginia Mason Medical Center, Steinway Piano.

Enrollment: 65.

My teaching ratings:

Semester	Out of 5.0
Summer 2008* (Part-time, DC)	4.36
Fall 2008 (Part-time, SG)	4.42
Fall 2009 (Part-time, SG)	4.34
Fall 2009 (Part-time, BA)	3.78

(5) BMGT 833, “Integer Programming”, PhD Elective, University of Maryland.

Topics covered: Reformulation, valid inequalities, complexity theory, matching and network problems, dynamic programming, cutting plane, branch and bound, column generation, Lagrangian relaxation, heuristics.

Enrollment: Varies from 15 to 25.

My teaching ratings:

Semester	Out of 5.0
Spring 2005	4.05
Spring 2007	4.21

3.2. Student Advising Activities

Ph.D. Students Graduated:

1. Guruprasad Pundoor – University of Maryland. Graduated in May 2005. Ph.D. thesis title: “*Integrated Production and Distribution Scheduling in Supply Chains*”.
Winner of the R.H. Smith School Abraham Golub Memorial Dissertation Proposal Prize, 2005.
2. Hang Xu – University of Pennsylvania. Graduated in June 2002. Ph.D. thesis title: “*Models and Algorithms for Practical Vehicle Routing*”.
3. Denny Cho – University of Pennsylvania. Jointly supervised by Prof. Ed Morlok and me. Graduated in May 2002. Ph.D. thesis title: “*Three Papers on Measuring the Reliability and Flexibility of Transportation System Capacity*”.

Ph.D. Students in Progress:

Ming Chen – University of Maryland. Fifth year. Working on dynamic pricing problems.
Crystal Oh – University of Maryland. First year.

4. SERVICE

4.1. Major Administrative Service

University of Maryland

- Chair, DO&IT, June 2010 – present.
- Associate Department Chair, DO&IT, January 2009 – present.
- Chair, OM Faculty Recruiting Committee, DO&IT Department, Fall 2009 – Spring 2010.
- Faculty Champion for Business Process Fellows Program, Fall 2008.
- Chair, DO&IT Department Undergraduate OM Major Marketing Committee, Fall 2008.
- Cohort director, Smith EMBA Program in China, January 2008 – present.
- Co-Chair, OM Faculty Recruiting Committee, D&IT Department, Fall 2007 – Spring 2008.
- Acting Director, OM/MS PhD Program, D&IT Department, Fall 2007.
- Member, Distance Learning Taskforce, Smith School, Fall 2007.
- Seminar Coordinator, D&IT Department, 2006.
- Member, OM Faculty Recruiting Committee, D&IT Department, 2004 – 2006.
- Chair, D&IT Department Undergraduate OM Major Marketing Committee, Fall 2005 – Spring 2007
- Member, D&IT Department Undergraduate OM Curriculum Committee, Spring 2005
- Member, D&IT PhD Committee, Spring 2005
- Member, Part-Time MBA Review Committee, Smith School, Fall 2003 -- Spring 2004.

University of Pennsylvania

- Faculty recruiting committee, Department of Systems Engineering, U of Penn, 1999--2001
- Seminar Committee, Department of Systems Engineering, U of Penn, 1999 – 2001
- Coordinator for PhD qualification exams, Dept. of Systems Engineering, U of Penn, 1997 – 2000
- Library Committee, School of Engineering and Applied Science, U of Penn, 1998--1999
- Academic Performance Committee, School of Engineering and Applied Science, U of Penn, 1999-2000

4.2. Professional Activities

Received 2002 Operations Research Meritorious Service Award from INFORMS

On Editorial Board of the Following Journals:

- *IIE Transactions*
- *Journal of Scheduling*
- *Networks*
- *Naval Research Logistics*

Organizing Committee Member, MSOM Annual Conference, June 2008, University of Maryland.

Tutorials Co-Chair, INFORMS Annual Meeting, 2008, Washington DC.

Served as a Judge for JFIG Paper Competition, 2006 – 2008.

Program Committee Member, The 2nd Multidisciplinary International Conference on Scheduling: Theory and Applications (MISTA), July 2005, New York University.

Program Committee Member, The 3rd Multidisciplinary International Conference on Scheduling: Theory and Applications (MISTA), August 2007, Paris, France.

Program Committee Member, The 4th Multidisciplinary International Conference on Scheduling: Theory and Applications (MISTA), August 2009, Dublin, Ireland.

Academic and Organizing Committees Member, China National Scheduling Conference, August, 2005, Shanghai.

Local Arrangement Committee Member, INFORMS National Conference, Philadelphia, November 1999

Invited Cluster Chair in the scheduling area, INFORMS National Conference, San Francisco, November, 2005

Invited Session Chair, INFORMS National Conferences, 1997 -- 2008

Proposal Reviewer or Review Panelist for

1. National Science Foundation, Division of Design, Manufacturing, and Industrial Innovation, Operations Research and Production Systems Programs (later changed to Service Enterprise Engineering Program), 2000, 2002, 2004, 2006, 2008.
2. Research Grants Council of Hong Kong, 2000, 2002, 2004, 2008.
3. Midwest Regional University Transportation Center, 2003.
4. Natural Sciences and Engineering Research Council of Canada, 2005.

Book Reviewer for Prentice-Hall, John Wiley, South-Western College Publishing, McGraw-Hill, 2001-2003, 2005, 2008

4.3. Memberships

Member of the following professional organizations:

- Institute for Operations Research and Management Science (INFORMS), 1997 - present
- Institute of Industrial Engineers (IIE), 1997 – present