

November 4, 2017

J. G. “Jim” Dai  
Leon C. Welch Professor  
School of Operations Research and Information Engineering (ORIE)  
Cornell University

## I. EARNED DEGREE

Ph.D.	1990	Stanford University	Mathematics
M.S.	1985	Nanjing University, Nanjing	Mathematics
B.S.	1982	Nanjing University, Nanjing	Mathematics

## II. CORNELL EMPLOYMENT

Leon C. Welch Professor of Engineering, School of ORIE, April, 2015 – present  
Professor, School of ORIE, August 16, 2012–March 2015

## III. GEORGIA TECH EMPLOYMENT

The Chandler Family Chair	ISyE	Aug 2013–Aug 2014 (on leave)
Edenfield Professor	ISyE	Aug 2012–Aug 2013 (on leave)
Edenfield Professor	ISyE	July 2007–Aug 2012
Professor	ISyE	April 1998–July 2007
Professor	Mathematics	April 1998–Dec 2001
Associate Professor	ISyE and Mathematics	May 1996–April 1998
Assistant Professor	ISyE and Mathematics	Aug 1990–May 1996

## IV. OTHER APPOINTMENTS

Distinguished Visitor, Institute for Mathematical Sciences, National University of Singapore, December 6 –19, 2015.

Special Term Professor in Operations Management, Tsinghua University, 2002–present

Visiting Professor in Decision Sciences, National University of Singapore, May 2011–April 2015, and May 2001–July 2001

James Riady Distinguished Visiting Professor in Decision Sciences, National University of Singapore, May 2009–April, 2011

Visiting Professor, Stanford University, Dec 1998–June 1999

Visiting Professor, Aarhus University, Oct 1998–Dec 1998

Visiting Assistant Professor, University of Wisconsin-Madison, Aug 1991–Dec 1991

## V. RESEARCH INTEREST

- Resource allocations in processing networks that model semiconductor wafer fabrication lines, computer systems, communications networks, data centers, and service systems. Examples of the latter systems include customer contact centers, hospital inpatient operations, airline yield management, and ridesharing networks.
- Fluid models, diffusion models, and stochastic processes

## VI. PAPERS LISTED IN ONLINE ARCHIVES

- [Google Scholar](#)
- [ORCID](#)

## VII. Ph.D. STUDENTS SUPERVISED AT GEORGIA TECH

1. Din-Horng Yeh (co-advised with Chen Zhou), ISyE; completed in Summer 1994  
Thesis title: *Sequential bottleneck decomposition and the QNET method for some open multiclass queueing networks*.  
Current position: Associate Professor, Kao Shiung Institute of Technology, Taiwan.
2. Wanyang Dai, School of Mathematics, Completed in Fall 1996  
Thesis title: *Diffusion approximations for open queueing networks with finite capacities*  
Current position: Professor, Department of Mathematics, Nanjing University, China.
3. John Hasenbein (co-advised with John Vande Vate), ISyE; Completed in Summer 1998  
Thesis title: *Capacity and scheduling of multiclass queueing networks*  
Current position: Professor, University of Texas at Austin
4. Otis Jennings, ISyE; Completed in May 2000.  
These title: *Multiclass Queueing Networks with Setup Delays: Stability Analysis and Heavy Traffic Approximation*  
First position: Assistant Professor, Graduate School of Business, Duke University.
5. Caiwei Li, ISyE; Completed in December 2001.  
Thesis title: *Dynamic scheduling of stochastic networks: dispatch and batch policies*  
First position: Oracle Corporation.
6. Jozo Acksteiner (co-advised with John Vande Vate), ISyE; Completed in August 2001.  
Thesis title: *Stability in re-entrant queueing systems and the role of cross-docks in the semiconductor industry*  
First position: Booz Allen Hamilton Inc.

7. Ki-Seok Choi, ISyE; Completed in July 2003.  
Thesis title: *Supply contracts with service level guarantee*  
Current position: associate professor, Hangoon University of Foreign Study, Seoul.
8. Junxia Chang (co-advised with Hayriye Ayhan), ISyE; Completed in December 2004.  
Thesis title: *Control of stochastic networks with non-stationary arrivals.*  
First position: Norfolk Southern
9. Wuqin Lin, ISyE; Completed in June 2005  
Thesis title: *Dynamic control of stochastic processing networks.*  
First position: Assistant Professor at Kellogg Business School of Northwestern University.
10. Tolga Tezcan (co-advised with Amy Ward), ISyE;  
Completed in June 2006.  
Thesis title: *State Space Collapse in Many Server Diffusion Limits of Parallel Server Systems and Applications.*  
First position: Assistant Professor at the Department of Industrial and Enterprise Systems Engineering, University of Illinois at Urbana-Champaign  
current position, tenured associate professor at London School of Business
11. Melda Ormeci Matoglu (co-advised with John Vande Vate), ISyE; Completed in June 2006.  
Thesis Title: *Inventory Control in a Make-To-Order Environment.*  
Won the Second Prize for Dantzig Dissertation Award from INFORMS in 2006.  
First position: Assistant Professor in The Faculty of Economics and Administrative Sciences of Ozyegin University, Istanbul.  
Current position: Lecturer in Decision Sciences, The Peter T. Paul College of Business and Economics, The University of New Hampshire
12. Josh Reed (co-advised with Amy Ward), ISyE; Completed in June 2007.  
Thesis title: *Queueing Models for Large Scale Telephone Call Centers*  
Won INFORMS Nicholson Student Paper Prize in 2006.  
Current position: tenured associate professor at the Stern School of Business, New York University.
13. Jiheng Zhang (co-advised with Bert Zwart), ISyE; Completed in July 2009.  
Thesis topic: *Limited Processor Sharing Queues and Parallel Server Queues*  
Finalist in INFORMS Nicholson Student Paper Prize in 2008.  
Honorable Mention in INFORMS Nicholson Student Paper Prize in 2009.  
Current position: tenured associate professor, Hong Kong University of Science and Technology.
14. Shuangchi He, ISyE; Completed in July 2011.

Thesis topic: *Parallel Server Queues with Customer Abandonment*

Current position: Assistant Professor, National University of Singapore.

15. Pengyi Shi (Co-advised with Pinar Keskinocak)  
Completed in December 2013.  
Thesis topic: Patient flow management in hospitals: data, model, and managerial insights  
Current position: Assistant professor, Krannert School of Management, Purdue University.
16. Xuefeng Gao (Co-advised with Ton Dieker)  
Completed in December 2013.  
Thesis topic: Stochastic models for service systems and orderbook dynamics  
Current position: Assistant professor, Chinese University of Hong Kong
17. Ralph Yuan (ISyE, GaTech, Co-advising with Shijie Deng)  
Completed in May 2014.  
Thesis topic: Risk diversification framework in algorithmic trading  
Current employer: J. P. Morgan

## VIII. Ph.D. STUDENTS SUPERVISED AT CORNELL

1. Anton Braverman (Co-advised with Andreea Minca); Completed in May 2017  
Thesis topics: Stein's method for steady-state diffusion approximations  
First position: Assistant professor, Kellogg School of Business, Northwestern University.
2. Jian Wu (co-advised with Peter Frazier); Completed in August 2017  
First position: Quantitative Researcher, AQR Capital Management
3. Jiekun Feng (Statistics)  
Start advising in spring 2015
4. Mark Gluzman (Center for Applied Mathematics)  
Start advising in spring 2017
5. Chang Cao (Statistics)  
Start advising in spring 2017

## IX. INTELLECTUAL PRODUCTS

### A. Refereed Journal Publications

1. J. G. Dai and J. M. Harrison, Steady-state analysis of RBM in a rectangle: numerical methods and a queueing application. *Annals of Applied Probability* **1**, 16–35 (1991).
2. J. G. Dai and J. M. Harrison, Reflected Brownian motion in an orthant: numerical methods for steady-state analysis. *Annals of Applied Probability* **2**, 65–86 (1992).

3. J. G. Dai and Y. Wang, Nonexistence of Brownian models of certain multiclass queueing networks. *Queueing Systems: Theory and Applications* **13**, 41–46 (1993).
4. J. G. Dai and J. M. Harrison, The QNET method for two-moment analysis of closed manufacturing systems. *Annals of Applied Probability* **3**, 968–1012 (1993).
5. J. G. Dai, V. Nguyen and M. I. Reiman, Sequential bottleneck decomposition: an approximation method for open queueing networks. *Operations Research* **42**, 119–136 (1994).
6. J. G. Dai and V. Nguyen, On the convergence of multiclass queueing networks in heavy traffic. *Annals of Applied Probability* **4**, 26–42 (1994).
7. J. G. Dai and R. J. Williams, Existence and uniqueness of semimartingale reflecting Brownian motions in a convex polyhedron. *Theory of Probability and its Applications*, **special invited paper**, **40**, 3–53 (1995). (In Russian, also appeared in the SIAM translation journal of the same name.)
8. J. G. Dai, On positive Harris recurrence of multiclass queueing networks: a unified approach via fluid limit models. *Annals of Applied Probability*, **5**, 49–77 (1995).
9. J. G. Dai and T. G. Kurtz, A multiclass station with Markovian feedback in heavy traffic. *Mathematics of Operations Research* **20**, 721–742 (1995).
10. J. G. Dai and S. P. Meyn, Stability and convergence of moments for multiclass queueing networks via fluid limit models. *IEEE Transactions on Automatic Control* **40**, 1889–1904 (1995).
11. J. G. Dai and G. Weiss, Stability and instability of fluid models for re-entrant lines, *Mathematics of Operations Research* **21**, 115–134 (1996).
12. J. G. Dai, A fluid-limit model criterion for instability of multiclass queueing networks, *Annals of Applied Probability*, **6**, 751–757 (1996).
13. J. Banks and J. G. Dai, Simulation studies of multiclass queueing networks, *IIE Transactions*, **29**, 213–219 (1997).
14. J. G. Dai, D. H. Yeh and C. Zhou, The QNET method for re-entrant queueing networks with priority disciplines, *Operations Research*, **45**, pp. 610–623 (1997).
15. J. G. Dai, J. J. Hasenbein and J. H. Vande Vate, Stability of a Three-Station Fluid Network, *Queueing Systems*, **Vol. 33**, 293–325 (1999).
16. J. G. Dai and W. Dai, A heavy traffic limit theorem for a class of open queueing networks with finite buffers, *Queueing Systems*, **Vol. 32**, 5–40 (1999).
17. J. G. Dai, J. H. Vande Vate, The Stability of Two-Station Multitype Fluid Networks, *Operations Research*, **48**, 721–744 (2000).
18. M. Bramson and J. G. Dai, Heavy traffic limits for some queueing networks, *Annals of Applied Probability*, **Vol. 11**, 49–90 (2001).

19. F. Avram, J. G. Dai and J. J. Hasenbein, Explicit solutions for variational problems in the quadrant. *Queueing Systems*, **Vol. 37**, 261–291 (2001).
20. J. G. Dai and G. Weiss, A fluid heuristic for minimizing makespan in job-shops, *Operations Research*, **Vol. 50**, 692–707 (2002).
21. Xinyang Shen, Hong Chen, J. G. Dai and Wanyang Dai, The Finite Element Method for Computing the Stationary Distribution of an SRBM in a Hypercube with Applications to Finite Buffer Queueing Networks, *Queueing Systems*, **Vol. 42**, 33–62 (2002).
22. J. G. Dai and Caiwei Li, Stabilizing batch processing networks, *Operations Research*, **Vol. 51**, 123–136, (2003).
23. J. G. Dai, John J. Hasenbein and John VandeVate, Stability and instability of a two-station queueing network, *Annals of Applied Probability*, **14**, 326–377, (2004).
24. K. S. Choi, J. G. Dai and J. S. Song, On measuring supplier performance under vendor-managed-inventory programs”, *Management Science and Operations Management*, **Vol. 6**, 53–72, 2004.
25. J. G. Dai and Otis B. Jennings, Stabilizing queueing networks with setups, *Mathematics of Operations Research*, **Vol. 29**, 891–922, 2004.
26. Junxia Chang, Hayriye Ayhan, J. G. Dai and Cathy H. Xia, Dynamic scheduling of a multiclass fluid model with transient overload, *Queueing Systems*, **Vol. 48**, 263–307, 2004.
27. J. G. Dai and Wuqin Lin, Maximum Pressure Policies in Stochastic Processing Networks, *Operations Research*, **Vol. 53**, 197–218, 2005.
28. Jiankui Yang, J. G. Dai, Jian-Gang You, and Hanqin Zhang, A simple proof of diffusion approximations for LBFS re-entrant lines, *Operations Research Letters*, **Vol. 34**, 199–204, 2006.
29. J. G. Dai John J. Hasenbein and Bara Kim, Stability of Join-the-Shortest-Queue Networks, *Queueing Systems*, **57**, 129–145, 2007.
30. Melda Ormeci, J. G. Dai and John VandeVate, Impulse Control of Brownian Motion: The Constrained Average Cost Case, *Operations Research*, **56**, 618–629, 2008.
31. J. G. Dai and Tolga Tezcan, Optimal Control of Parallel Server Systems with Many Servers in Heavy Traffic, *Queueing Systems*, **59**, 95–134, 2008.
32. J. G. Dai and Wuqin Lin, Asymptotic optimality of maximum pressure policies in stochastic processing networks, *Annals of Applied Probability*, **18**, 2239–2299, 2008.
33. Jiheng Zhang, J. G. Dai and Bert Zwart, Law of Large Number limits of Limited Processor Sharing Queues, *Mathematics of Operations Research*, **Vol. 34**, 937–970, 2009.
34. Varun Gupta, J. G. Dai, Mor Harchol-Balter and Bert Zwart, The effect of higher moments of job size distribution on the performance of an  $M/G/s$  queueing system, *Queueing Systems*, **Vol. 64**, page 5–49, 2010.

35. Tolga Tezcan and J. G. Dai, Dynamic Control of N-Systems with Many Servers: Asymptotic Optimality of a Static Priority Policy in Heavy Traffic, *Operations Research*, **Vol. 58**, page 94–110, 2010.
36. Maury Bramson, J. G. Dai and J. Michael Harrison, Positive recurrence of reflecting Brownian motion in three dimensions, *Annals of Applied Probability*, **Vol. 20**, page 753–783, 2010.
37. J. G. Dai and Shuangchi He, Customer abandonment in many-server queues, *Mathematics of Operations Research*, **Vol. 35**, page 347–362, 2010.
38. J. G. Dai, Shuangchi He and Tolga Tezcan, Many-server diffusion limits for  $G/Ph/n + GI$  queues, *Annals of Applied Probability*, **Vol. 20**, page 1854–1890, 2010.
39. Jiheng Zhang, J. G. Dai and Bert Zwart, Diffusion Limits of Limited Processor Sharing Queues, *Annals of Applied Probability*, **Vol. 21**, page 745–799, 2011.
40. J. G. Dai and Tolga Tezcan, State space collapse in many-server diffusion limits of parallel server systems, *Mathematics of Operations Research*, **Vol. 36**, page 271–320, 2011.
41. J. G. Dai and A. B. Dieker, Nonnegativity of solutions to the basic adjoint relationship for some diffusion processes, *Queueing Systems*, **Vol. 68**, page 295–303, 2011.
42. J. G. Dai and M. Miyazawa, Reflecting Brownian motion in two dimensions: exact asymptotic for the stationary distribution. *Stochastic Systems*, **Vol. 1**, page 146–208, 2011.
43. J. G. Dai and J. Michael Harrison, “Reflecting Brownian motion in three dimensions: A new proof of sufficient conditions for positive recurrence”, *Mathematical Methods for Operations Research*, **75**, page 135–147, 2012.
44. J. G. Dai and Shuangchi He, [Many-Server Queues with Abandonment: A Survey of Diffusion and Fluid Approximations](#), *Journal of Systems Science and Systems Engineering*, **21**, page 1–36, 2012.
45. J. G. Dai and Masakiyo Miyazawa, Stationary distribution of a two-dimensional SRBM: geometric views and boundary measures, *Queueing Systems*, **74**, page 181–217, 2013.
46. Shuangchi He and J. G. Dai, [Many-server queues with customer abandonment: numerical analysis of their diffusion models](#), *Stochastic Systems*, **3**, page 96–147, 2013.
47. J. G. Dai and Dacheng Yao, [Brownian inventory models with convex holding cost: Part 1 average-optimal controls](#), *Stochastic Systems*, **3**, page 442–449, 2013.
48. J. G. Dai and Dacheng Yao, [Brownian inventory models with convex holding cost: Part 2 discount-optimal controls](#), *Stochastic Systems*, **3**, page 500–573, 2013.
49. J. G. Dai, A. B. Dieker, and Xuefeng Gao, [Validity of heavy-traffic steady-state approximations in many-server queues with abandonment](#), *Queueing Systems*, **78**, page 1–29, 2014.
50. J. G. Dai, Masakiyo Miyazawa, and Jian Wu, “A multi-dimensional SRBM: Geometric views of its product form stationary distribution”, *Queueing Systems*, **78**, page 313–335,

2014. [Download from arXiv](#). This version has an extra appendix (D) on the equivalence of various versions of basic adjoint relationship.
51. J. G. Dai, Masakiyo Miyazawa, and Jian Wu, “[Decomposable stationary distribution of a multidimensional SRBM](#)”, *Stochastic Processes and their Applications*, **125**, 1790-1820, 2015.
  52. P. Shi, M. Chou, J. G. Dai, D. Ding, and J. Sim, [Models and Insights for Hospital Inpatient Operations: Time-Dependent ED Boarding Time](#), *Management Science*, **62**, page 1–28, 2016.
  53. Anton Braverman, J. G. Dai and Jiekun Feng, “[Stein’s method for steady-state diffusion approximations: an introduction through the Erlang-A and Erlang-C models](#)”, *Stochastic Systems*, **6**, 301-366, 2016.
  54. J. G. Dai and Pengyi Shi, “[A Two-Time-Scale Approach to Time-varying Queues in Hospital Inpatient Flow Management](#)”, *Operations Reserch*, **65**, 514-536, 2017.
  55. Anton Braverman and J. G. Dai “[Stein’s method for steady-state diffusion approximations of  \$M/Ph/n + M\$  systems](#)”, *Annals of Applied Probability*, **27**, 550-581, 2017.
  56. Anton Braverman, J. G. Dai, and Masakiyo Miyazawa, “[Heavy traffic approximation for the stationary distribution of a generalized Jackson network: the BAR approach](#)”, *Stochastic Systems*, **7**, 143-196, 2017.
  57. Ping Yin, Sen Yang, Jun Xu, J. G. Dai, Bill Lin, Improving Backpressure-based Adaptive Routing via Incremental Expansion of Routing Choices, submitted for publication in January 2017.

## B. Refereed Proceedings Publications and Book Chapters

1. J. G. Dai, Stability of open multiclass queueing networks via fluid models. *Proceedings of IMA Workshop on Stochastic Networks*, pp. 71–90, editors: F. Kelly and R. J. Williams, Springer-Verlag, New York, 1995.
2. J. G. Dai, J. H. Vande Vate, Global Stability of Two-Station Queueing Networks, Proceedings of Workshop on Stochastic Networks: Stability and Rare Events. Editors: Paul Glasserman, Karl Sigman and David Yao, pp. 1–26, Springer-Verlag, 1996.
3. J. G. Dai and B. Prabhakar, The throughput of data switches with and without speedup, *IEEE INFORCOM 2000*, 556–564 (2000).
4. J. G. Dai and Otis B. Jennings, Stability of General Processing Networks, In D. D. Yao, H. Zhang and X. Y. Zhou, editors, *Stochastic Models and Optimization*, Springer, 2002.
5. J. S. Chang, Hayriye Ayhan, J. G. Dai, Zhen Liu, Mark S. Squillante and Cathy H. Xia, Optimal dynamic scheduling in a multiclass fluid model of Internet servers with transient overload, *Proceedings of The 42nd Conference on Decision and Control*, pp. 721–727, IEEE Control Systems Society, December 2003.



6. J. G. Dai, Wuqin Lin, Rajeeva Moorthy, and Chung-Piaw Teo, Berth Allocation Planning Optimization in Container Terminals, in *Supply Chain Analysis: a Handbook on the Interaction of Information System and Optimization*, C. S. Tang, C.-P. Teo, and K. K. Wei Eds., Springer, New York, 2008.
7. J. G. Dai and Shuangchi He, Queues in Service Systems: Customer Abandonment and Diffusion Approximation, *Tutorials in Operations Research*, INFORMS-Charlotte 2011, November, 2011.
8. Weijun Ding, Jim Xu, J. G. Dai, Yang Song, and Bill Lin, Sprinklers: A Randomized Variable-Size Striping Approach to Reordering-Free Load-Balanced Switching, *ACM CoNEXT: the 10th International Conference on Emerging Networking Experiments and Technologies*, Accepted for publication in November 2014. [The arXiv version can be downloaded here.](#)

### C. Submitted Papers for Publications

1. J. G. Dai and Pengyi Shi, [Inpatient Overflow: An Approximate Dynamic Programming Approach](#), under revision for *Manufacturing & Service Operations Management*, 2017.
2. Anton Braverman, J. G. Dai, Xin Liu, and Lei Ying, Empty-car routing in ridesharing systems. Submitted for publication in 2017. <https://arxiv.org/abs/1609.07219>.
3. J. G. Dai, Anton J. Kleywegt, and Yongbo Xiao, Network Revenue Management with Cancellations and No-shows. Submitted for publication in June 2017.

### D. Papers on archives

1. J. G. Dai, Weijun Ding, Anton Kleywegt, Xinchang Wang, and Yi Zhang, [“Choice based revenue management for parallel flights”](#), March 2014, revision May 2015.

### E. Non-Refereed Proceedings Publications

1. J. G. Dai and Steven Neuroth, DPPS scheduling policies in semiconductor wafer fabs, In G. T. Mackulak, J.W. Fowler and A. Schomig, editors, *Proceedings of the International Conference on Modeling and Analysis of Semiconductor Manufacturing*, pp. 194-199, Tempe, Arizona, 2002.

### F. Other Non-Refereed Publications

1. Earl Barnes, J. G. Dai, Shijie Deng, Doug Down, Mark Goh, Hoong Chuin Lau, and Moosa Sharafali, Electronics Manufacturing Service Industry, August 2000,
2. J. G. DAI, Shi-Jie DENG, Jihong OU, Kwok-Leung TSUI, Yang WANG, Huiwen ZHANG, Derong WANG, Xiaohong LIU, Rui LI, 2002 China Logistics Provider Survey, January 2003, School of Industrial and Systems Engineering, Georgia Institute of Technology, and The Logistic Institute–Asia Pacific.
3. J. G. DAI, Yang WANG, Nancy Wong, Derong WANG, Xiaohong LIU, Rui LI, 2003 China Logistics User Survey, August 2003, School of Industrial and Systems Engineering, Georgia Institute of Technology, and The Logistic Institute–Asia Pacific.

4. J. G. DAI, Yuepeng Li, Xiutian Liu, Yang WANG, Nancy Wong, and Chen Zhou, 2004 China Road Transportation Enterprise Survey Report, February 2005, School of Industrial and Systems Engineering, Georgia Institute of Technology, and The Logistic Institute–Asia Pacific.
5. “Beer Distribution in China”, The Supply Chain Logistics Institute, The School of Industrial and Systems Engineering, Georgia Institute of Technology, March 2008; this report was written for the Center China Logistics, co-directed then by Professors Jim Dai and Chen Zhou, with numerous collaborators from China and US.

## X. SIGNIFICANT PROFESSIONAL SERVICES

### a. Editorial Positions for INFORMS Journals

1. *Mathematics of Operations Research*
  - i. Editor-in-Chief, January 1, 2013 – December 31, 2018
  - ii. Interim Editor-in-Chief, March 2012 – December 31, 2012
  - iii. Area Editor in Stochastic Models, August 2010 – December 31, 2012
  - iv. Associate Editor, 1996–2001 and 2004–2010
2. *Operations Research*
  - i. Area Editor in Stochastic Models, January 1, 2012 – July 30, 2012
  - ii. Associate Editor, 1996–2005
3. *Management Science*, Associate Editor, 1998–2004
4. *Stochastic Systems*
  - i. Advisory editor, January, 2017 – present
  - ii. Associate editor, 2009–2016

### b. Other Editorial Positions

1. Series Co-Editor, *Handbooks in Operations Research and Management Science*, co-editing with J. K. Lenstra and G. L. Nemhauser, January 2006– October 2007.
2. Founding Associate Editor, *Probability Survey*, 2003–present.
3. Associate Editor, *Queueing Systems*, 1994–December, 2007.
4. Associate Editor, *Journal of Applied Probability*, 2016–present.

### c. INFORMS Committees

1. Council Member, Applied Probability Society of INFORMS, 1999-2001.
2. Member, INFORMS Lanchester Prize Committee, 2002-2003.
3. Member, search committee for editor-in-chief for *Mathematics of Operations Research*, 2003.
4. Chair, INFORMS Lanchester Prize Committee, 2003-2004.
5. Member, INFORMS Applied Probability Society Prize Committee, 2006–2007.

6. Chair, INFORMS Applied Probability Society Prize Committee, 2008–2009.
7. Member, INFORMS John von Neumann Theory Prize Committee, 2008–2010.
8. Chair, INFORMS John von Neumann Theory Prize Committee, 2010–2011.
9. Member, search committee for editor-in-chief for *Stochastic Systems*, 2013.
10. INFORMS APS representative, IMS Committee on Special Lectures, 2014–2017
11. Member, search committee for editor-in-chief for *Stochastic Systems*, 2016.

**d. Advisory Boards**

[ESD Advisory Board](#), Singapore University of Technology and Design, 2016–2017 (Member),  
2017-2019 (Chair)

**XI. CONFERENCE ORGANIZATIONS**

1. Cluster Chair, INFORMS Fall National Meeting, November, 1996.
2. Organizing Committee, IMS third International Probability Symposium, Park City, Utah, July 1997.
3. Co-Organizer, Stanford SIMA Workshop, Stanford, California, April 1999.
4. Organizing Committee, Workshop on Stochastic Networks, June 2000, Madison Wisconsin.
5. Cluster Chair, INFORMS Fall National Meeting, November, 2000.
6. Organizing Chair, Workshop on stochastic models, July 2001, National University of Singapore.
7. Member, Program Committee of International Workshop on Decision Making under Uncertainty, May 27-28, 2002, Beijing, China
8. Member, Program Committee of International Conference on Global Supply Chain Management, August 5-7, 2002, Beijing, China.
9. Member, Program Committee of the 5th International Conference on Management, May 3–5, 2004, Marco, China.
10. Member, Program Committee of Stochastic Networks Conference, June 2004, Montreal, Canada.
11. Member, Program Committee for the 1st Applied Probability Workshop in China, Beijing, July 2005.
12. Member, Program Committee for the First International Conference on Performance Evaluation Methodologies and Tools, Pisa, Italy, October 11–13, 2006.
13. Cluster Chair, Applied Probability Society, INFORMS International, Hong Kong, June 2006.
14. Member, Program Committee for ACM SIGMETRICS 2007, the International Conference on Measurement and Modeling of Computer Systems, San Diego, California, June 12–16, 2007.
15. Member, Program Committee for ACM SIGMETRICS 2008, MAMA 2008 Workshop, Annapolis, Maryland, June 2, 2008.
16. Member, Organizing Committee, Stochastic Processing Network Conference in Honor of J. Michael Harrison August 29-30, 2009, Stanford University, CA, USA.

17. Member, Organizing Committee, From Markov Processes to Brownian Motion and Beyond: An International Conference in Memory of Kai Lai Chung, June 13-16, 2010, Peking University, Beijing, China.
18. Member, Program Committee for ACM SIGMETRICS 2010, the International Conference on Measurement and Modeling of Computer Systems, New York City, New York, June 14–18, 2010.
19. Session chairs for numerous INFORMS and IMS meetings since 1997.

## XII. PRESENTATIONS

### a. Plenary and Keynote Talks

1. *Plenary talk*: The 26th Conference on Stochastic Processes and their Applications, Beijing, China, June 1999.
2. *Plenary talk*: The 15th INFORMS Applied Probability Society Conference, Cornell University, Ithaca, New York, July 12-15, 2009.
3. *Keynote Speech*: The 7th International Conference on Service Systems and Service Management (ICSSSM 2010), Tokyo, Japan, June 28-30, 2010
4. *Plenary talk*: The 36th conference on the mathematics of operations research, Lunteren, The Netherlands, January 18-20, 2011.
5. *Plenary talk*: The 6th International conference on queueing theory and network applications, Seoul, Korea, August 23-26, 2011.
6. *Keynote lecture*: Inpatient flow management in a Singapore Hospital, Symposium – Healthcare Decision Making in the Age of Personalised Medicines, Organized by Department of Pharmacy, NUS and Singapore Health Services Pte Ltd., May 19, 2012.
7. *The Markov Lecture*: Applied Probability Society of INFORMS, Phoenix, October 2012.
8. *Keynote lecture*: Stein's Method for Steady-State Approximations: Error Bounds and Engineering Solutions. Eurandom, Netherlands, November 2016.

### b. Tutorials

1. *Tutorial*: INFORMS Fall National Meeting, Atlanta, November 1996.
2. *Tutorial*: INFORMS Fall National Meeting, Charlotte, NC, November 2011.
3. *Tutorial*: POMS International, Singapore, July 2014.
4. *Tutorial*: ACM Sigmetrics, June 2017.

### c. Invited Conference and Workshop Presentations

1. SIAM Conference on Applied Probability in Science and Engineering, New Orleans, LA, March 1990.
2. ORSA/TIMS 30th Joint National Meeting, Philadelphia, PA, October 1990.
3. ORSA/TIMS Special Meeting on Applied Probability, Monterey, CA, January 1991.
4. The 4th Southeast Probability Meeting, Lexington, KY, June 1991.
5. Summer School on Scheduling Theory and its Applications, Bonas, France, September 1992.
6. ORSA/TIMS 34th Joint National Meeting, San Francisco, CA, November 1992.

7. The 2nd IMS International Symposium on Probability and its Applications, Bloomington, IN, March 1993.
8. Conference on Applied Probability in Engineering, Computer and Communication Sciences, organized by INRIA/ORSA/TIMS/SMAI, Paris, France, June 1993.
9. Thirty-First Annual Allerton Conference on Communication, Control, and Computing, organized by University of Illinois at Urbana-Champaign, September 1993.
10. The 3rd World Congress of the Bernoulli Society for Mathematical Statistics and Probability, Chapel-Hill, North Carolina, June 1994.
11. ORSA/TIMS 38th Joint National Meeting, Detroit, Michigan, October 1994.
12. The 8th ORSA/TIMS Applied Probability Group Conference, Atlanta, Georgia, June 1995.
13. Stochastic Networks Workshop, Heriot-Watt University, Edinburgh, UK, August 1995.
14. Workshop on Stochastic Networks: Stability and Rare Events, Columbia University, New York, November 1995.
15. IFORS 14th Triennial Conference, Vancouver, July 1996.
16. AMS Southeastern Sectional Meeting, Chattanooga, Tennessee, October 1996.
17. INFORMS Spring National Meeting, San Diego, May 1997.
18. MCAA International Workshop on Networks and Random Structures on Trees, Sandbjerg Manor, Denmark, June 1997.
19. The 9th INFORMS Applied Probability Group Conference, Boston, MA, July 1997.
20. IMS third International Probability Symposium, Park City, Utah, July 1997.
21. INFORMS Fall National Meeting, Dallas, November 1997.
22. INFORMS Spring National Meeting, Montreal, April 1998.
23. Workshop on Stochastic Modelling and Analysis of Communication Networks, Lund University, Lund, October 1998.
24. Workshop on Stochastic Networks: Large Deviations, Stability and Fluid Models, Lorentz Center, Leiden University, Leiden, Netherlands, October 1998.
25. Applied Probability Workshop, Oberwolfach Mathematical Institute, Oberwolfach, Germany, December 1998.
26. Applied Probability Workshop, Chinese University of Hong Kong, June 1999.
27. Stanford SIMA Workshop, Stanford, California, April 1999.
28. 1998 Erlang Prize Recipients Presentation, INFORMS National Meeting, Cincinnati, May 1999.
29. 10th INFORMS Applied Probability Conference, Ulm, Germany, July 1999.
30. The 37th Annual Allerton Conference on Communication, Control, and Computing, organized by University of Illinois at Urbana-Champaign, September 1999.
31. The Stochastic Network Conference, Madison, Wisconsin, June 19 - June 24, 2000.
32. INFORMS Fall National Meeting, San Antonio, Texas, November 2000.
33. Conference on Stochastic Models: Part I, Beijing, June 2001.
34. Conference on Stochastic Models: Part II, Hong Kong, June 2001.
35. The Stochastic Network Conference, Stanford, June 24-29, 2002.

36. INFORMS Fall National Meeting, San Jose, California, November 2002.
37. INFORMS Fall National Meeting, Atlanta, GA, October 2003.
38. Many-Server Asymptotic Optimality in the N-Model, INFORMS National Meeting, Pittsburgh, November, 2006.
39. Stability of Join-the-Shortest-Queue Networks, INFORMS National Meeting, Seattle, November 2007.
40. INFORMS National Meeting, Washington DC, October 2008.
41. Fluid models and stability of multiclass queueing networks, Workshop on Flows and Networks in Complex Media April 27-May 1, 2009, Institute for Pure & Applied Mathematics (IPAM), UCLA, Los Angeles, California
42. Maximum Pressure Policies in Stochastic Processing Networks, Stochastic Processing Network Conference in Honor of J. Michael Harrison August 29-30, Stanford University, CA, USA
43. Positive recurrence of semimartingale reflecting Brownian motions, From Markov processes to Brownian motion and beyond: an international conference in memory of Kai Lai Chung , June 13-16, 2010, Beijing.
44. INFORMS Fall National Meeting, Austin, Texas, November 2010.
45. A Workshop on Optimization, Scheduling and Queues, Honouring Gideon Weiss on his Retirement, June 6-8, 2012, The University of Haifa, Israel.
46. IWAP 2012, International Workshop on Applied Probability, June 11-14, Jerusalem, Israel.
47. The 2012 Stochastic Network Conference, June 18-22, 2012, MIT.
48. The 2012 Mostly OM Conference, June 28-29, 2012, Tsinghua University, Beijing.
49. Mathematical Models for Hospital Inpatient Flow Management, Opening workshop for 2012-13 Program on Data-Driven Decisions in Healthcare, August 26-29, 2012.
50. INFORMS Fall National Meeting, Minneapolis, Minnesota, October 2013.
51. Workshop on New Directions in Stein's Method, May 18 - 29 May, 2015, Institute for Mathematical Sciences, NUS.
52. Applied Probability Frontiers: Computational and Modeling Challenges, June 1-5, 2015, Banff International Research Station, Banff, Canada.
53. Workshop on Reflected Brownian Motions, Stochastic Networks, and their Applications, June 25-27, 2015, Institute for Mathematics and its Applications.
54. Healthcare Operations Workshop, July 4, 2015, Koç university, Turkey.
55. INFORMS Applied Probability Society Conference, July 5-8, 2015, Istanbul, Turkey
56. Workshop on Congestion Games, December 15–18, 2015, Institute for Mathematical Sciences, NUS.
57. Stochastic Networks Conference, UC San Diego, June 20-24, 2016
58. INFORMS National Meeting, Nashville, TN, November 2016.

#### **d. Invited Seminar Presentations**

1. Bellcore Laboratories, Morristown, NJ, March 1991.
2. The Department of Mathematics, University of Colorado at Denver, Denver, CO, April 1991.

3. The Department of Mathematics, University of Wisconsin, Madison, WI, November 1991.
4. The Center for Mathematical Studies, University of Wisconsin, Madison, WI, July 1992.
5. The Coordinated Science Laboratory, University of Illinois, Urbana, IL, March 1993.
6. Department of Operations Research, Princeton University, Princeton, NJ, November, 1993.
7. The Institute of Applied Mathematics, Academia Sinica, Beijing, China, December 1993.
8. The Department of Mathematics, Nanjing University, Nanjing, China, December 1993.
9. The Institute of Mathematics and Its Applications, University of Minnesota, Minneapolis, MN, February 1994.
10. The OR Center, MIT, Boston, MA, October 1994.
11. The Department of Mathematics, Auburn University, Auburn, AL, January 1995.
12. The Department of IEOR and The School of Business, Columbia University, New York, NY, February 1995.
13. The Graduate School of Business, Stanford University, Stanford, CA, May 1995.
14. The Department of Statistics, East China Normal University, Shanghai, China, November, 1995.
15. Industrial Engineering and Management, Technion, Haifa, Israel, June 1996.
16. Harris Semiconductor, Palm Bay, Florida, August 1996.
17. The Department of Industrial Engineering, Seoul National University, Seoul, South Korea, August 1998.
18. The Department of Mathematics, Korea Advanced Institute for Science and Technology, Jeonju, South Korea, August 1998.
19. The Department of Statistics, Lund University, Lund, Sweden, September, 1999.
20. The Department of Statistics, Aarhus University, Aarhus, Denmark, October, 1998.
21. The Department of Mathematics, Ulm University, Ulm Germany, November, 1998.
22. The Department of Mathematics, University of Rome, Rome, Italy, November 1998.
23. The Probability Seminar, Department of Statistics, Stanford University, California, January, 1999.
24. The Joint Berkeley-Stanford Complex System Seminar, Department of Electrical Engineering and Computer Sciences, University of California, Berkeley, California, February, 1999.
25. Department of Mathematics, University of California, San Diego, California, April, 1999.
26. National Semiconductor, Santa Clara, California, May 1999.
27. INTEL, Santa Clara, California, May 1999.
28. Department of EESOR, Stanford University, California, May 1999.
29. TECH Semiconductor, Singapore, March 2000.
30. The Logistics Institute – Asia Pacific, National University of Singapore, March 2000.
31. MIT OR Center, Boston, March 2000.
32. Department Manufacturing Engineering, Boston University, March 2000.
33. Department of Decision Science, National University of Singapore, May, 2001.
34. Hitachi-Nippon Steel (Semiconductor Division), Singapore, May 2001.
35. Systems on Silicon Mfg. Co. Pte. Ltd., 70 Pasir Ris Drive 1, Singapore, June 2001.

36. Department of Industrial and Operations Engineering, University of Michigan, October 2002.
37. School of Economics & Management, Tsinghua University, May 2005.
38. The Institute of Applied Mathematics, Chinese Academia of Sciences, Beijing, June 2005.
39. School of Management, The University of Texas at Dallas, March 2007.
40. Columbia University, April 2007.
41. IBM Watson Research Center, Leaders in Mathematical Sciences Seminar Series, April 2008.
42. Department of Decision Science, National University of Singapore, Singapore, May 15, 2009.
43. Department of Mathematics, National University of Singapore, May 28, 2009.
44. Lee Kong Chian School of Business, Singapore Management University, May 22, 2009.
45. Department of Industrial Engineering, DalHousie University, Halifax, Nova Scotia, Canada, July 28, 2009.
46. Kellogg School of Business, Northwestern University, February 2010.
47. Newton Institute, Cambridge, England, March 2010.
48. University College of London, England, March 2010.
49. Institute for Systems and Robotics, Technical University of Lisbon, Portugal, March 2010.
50. Department of Industrial & Systems Engineering, National University of Singapore, July 2010.
51. University of North Carolina, Chapel Hill, September 2010.
52. Hong Kong University of Science and Technology, May 20, 2011.
53. ORIE Colloquium, Cornell University, September 20, 2011.
54. Pennsylvania State University, October 4, 2011.
55. Columbia University, January 24, 2012.
56. ORIE Colloquium, Cornell University, September 11, 2012.
57. Math Probability Seminar, Cornell University, November 26, 2012.
58. ORFE Seminar, Princeton University, March 12, 2013.
59. Information, Systems, and Networks (ISN) Seminar, Cornell, September 4, 2013
60. ORC Seminar, MIT, September 26, 2013.
61. MIT Stochastics and Statistics Seminar, September 26, 2013
62. MS&E Applied Probability Seminar, Stanford, October 14, 2013.
63. Probability Seminar, University of Rochester, October 18, 2013.
64. Network Science Seminar Series, Arizona State University, January 9, 2014
65. School of Computing, Informatics, and Decision Systems Engineering (CIDSE) Seminar, Arizona State University, January 16, 2014
66. Epstein Institute Seminar, University of Southern California, January 17, 2014.
67. SCAN Seminar, Cornell University, March 24, 2014.
68. IEOR Seminar, University of California-Berkeley, April 4, 2014.
69. Industrial and Manufacturing Engineering Seminar, Penn State University, April 8, 2014,
70. OM Seminar, Tepper School of Business, Carnegie Mellon University, April 18, 2014.
71. ESD Seminar, Engineering Systems and Design, Singapore University of Technology and Design, July 9, 2014.
72. [Applied Probability & Risk Seminar](#), Columbia University, November 13, 2014.



73. Stein's Method and Hospital Inpatient Flow Management, Stanford OIT Brown Bag Lunch Seminar, October 8, 2015.
74. Statistics Seminar, Auckland University, November 30, 2015.
75. Management Science and Engineering Seminar, Tsinghua University, December 23, 2015.
76. Decision Sciences Seminar, Duke University, September 28, 2016.
77. ISE Seminar, UIUC, October 20, 2016.
78. Master Forum, Chinese University of Hong Kong (Shenzhen), June 2, 2017.
79. Department of Industrial and Systems Engineering Seminar, University of Minnesota, September 27, 2017

### **XIII. GRANTS AND CONTRACTS AT GEORGIA TECH (PI and co-PIs contribute equally)**

1. Developing the QNET Method for Analysis of Manufacturing Response Time. Texas Instruments Inc., Dallas, Texas. \$24,000, October 1990–September 1991.
2. Queueing Networks in Heavy Traffic. Division of Mathematical Sciences of National Science Foundation. \$45,000, August 1992–July 1995.
3. The QNET Method for analysis of Manufacturing Response Time. Texas Instruments Inc., Dallas, Texas. \$24,500, April 1992–March 1993.
4. Stochastic Scheduling of Manufacturing systems (Co-principal Investigator, joint with Gideon Weiss). Division of Design and Manufacturing of National Science Foundation, \$150,000, March 1993–February 1995.
5. NSF Young Investigator Award. National Science Foundation, \$312,500, July 1994–August 2001.
6. Scheduling and control of manufacturing systems by fluid model heuristics (Co-principal Investigator, joint with Gideon Weiss), US-Israel Binational Science Foundation, Jerusalem, Israel, \$66,000, September 1995–August 1998.
7. Avoiding virtual Bottlenecks, Harris Semiconductor, Melbourne, Florida, \$20,000, December 1995–November 1996.
8. US-South Korea Cooperative Program, NSF, \$12,412, September 1997–August 2001.
9. Avoiding Artificial Bottlenecks in Semiconductor Wafer Fabrication Facilities (Co-principal investigator, joint with John Vande Vate), Division of Design, Manufacturing and Industrial Innovations, National Science Foundation, \$335,033, October 1998-September 2002.
10. Electronics Supply Chains (principal investigator, with other two team members), The Logistics Institute–Asia Pacific, \$150K, 2000
11. Research Experiences for Undergraduates (REU), National Science Foundation, \$6000, 2001.
12. International Logistics (principal investigator, with two team members), The Logistics Institute–Asia Pacific, \$300K, 2001-2004.

13. Dynamic Resource Allocation in Stochastic Processing Networks, funded by the Operations Research Program, Division of Design, Manufacturing and Industrial Innovations, National Science Foundation, \$300K, June 2003 – October 2006.
14. IBM Faculty Award, \$40K, 2003.
15. China Logistics Study (co-principal investigator, joint with Chen Zhou), The Logistics Institute, \$100K, 2006.
16. Collaborative Research: CSR—SMA: New Breakthrough in Analyzing Limited Resource Sharing Systems, (co-principal investigator, joint with Bert Zwart in ISyE and Mor Harchol-Balter from Carnegie Mellon University), funded by the Computer and Network Systems Division, National Science Foundation, \$50K (Georgia Tech portion), August 1, 2007 - July 31, 2008.
17. Scalable Analysis for Customer Contact Centers, (co-principal investigator, joint with Bert Zwart in ISyE), funded by the Operations Research Program, Division of CMMI, National Science Foundation, \$395K, July 1, 2007 - June 30, 2010; Research Experiences for Undergraduates (REU), \$6000, 2007.
18. Stochastic Control In Semiconductor Supply Chain, (co-principal investigator, joint with John Vande Vate in ISyE and Melda Ormeci in The Faculty of Economics and Administrative Sciences of Ozyegin University, Istanbul), funded by the Operations Research Program, Division of CMMI, National Science Foundation, \$479,955, August 1, 2008 - July 31, 2011.
19. Analysis and control of large-scale service systems, funded by the Operations Research Program, Division of CMMI, National Science Foundation, \$260K, August 1, 2010 - July 31, 2013. Research Experiences for Undergraduates (REU), \$6000, 2012.
20. Crew scheduling and revenue management, funded by Eastern China Care Systems (joint with Ellis Johnson and Anton Kleywegt), \$200K, January 1, 2012 - December 31, 2013.

#### **XIV. GRANTS AND CONTRACTS AT CORNELL (PI and co-PIs contribute equally)**

1. CREATIV: Stochastic Processing Calculus: A New Methodology for Advanced Semiconductor Manufacturing and Data Center Networking (co-PI, joint with Bill Lin (PI) of UCSD and Jun Xu of Georgia Tech), National Science Foundation, \$750K, August 1, 2012 - July 31, 2015.
2. High Fidelity Modeling and Two-Time-Scale Analysis for Hospital Inpatient Flow Management, Division of CMMI, National Science Foundation, \$365K, August 15, 2013 - July 31, 2016.
3. Workshop: Reflected Brownian Motions, Stochastic Networks, and their Applications, Division of CMMI, National Science Foundation, \$12K, September 1, 2014 - February 29, 2016.
4. Airline Revenue Management, an Asian airline, \$200K, April 1, 2015 - March 30, 2017. (Co-principal Investigator, joint with Anton Kleywegt at Georgia Tech; Cornell portion is \$66000.)
5. Stein's Method for Steady-State Diffusion Approximations, Division of CMMI, National Science Foundation, \$330K, December 1, 2015 - November 30, 2018.

**XV. HONORS AND AWARDS**

1. NSF Young Investigator Award by National Science Foundation, 1994.
2. Bergmann Memorial Research Grant Award by US-Israel Binational Science Foundation, Jerusalem, Israel, July 1995.
3. The 1996 Sigma Xi best paper award, May 1996.
4. The Best Publication Award, Applied Probability Society of INFORMS, May 1997.
5. The Erlang Prize, Applied Probability Society of INFORMS, April 1998.
6. Overseas Chinese Young Investigator Award, Chinese National Science Foundation, 2001.
7. Elected Fellow of Institute of Mathematical Statistics, July 2003.
8. 2003 IBM Faculty Award.
9. Elected Fellow of INFORMS, 2007.
10. Delivered *The Markov Lecture*: Applied Probability Society of INFORMS, Phoenix, October 2012.
11. Professor of The Year 2014-215, voted by undergraduates, School of ORIE, Cornell University.
12. Distinguished visiting professor, Institute of Mathematical Sciences, National University of Singapore, December 2015.
13. The Best Publication Award, Applied Probability Society of INFORMS, October 2017.
14. Sonny Yau '72 Excellence in Teaching Award, College of Engineering, Cornell University, October 2017.
15. Operations Research Distinguished Seminar Series speaker, Texas A&M University, November 27, 2017.

**XVI. COURSES TAUGHT AT GEORGIA TECH**

Quarter	School	Course	No. of Students	Evaluation		
				Q#24	C1, C2, C3	
Fa 90	Math	4215	Introduction to Probability	14/23	4.0	3.5, 4.3, 3.8
W 91	Math	4215	Introduction to Probability	14/33	3.0	3.2, 4.1, 3.4
W 91	ISyE	8101	Stochastic Processes II	8/9	4.5	4.4, 4.5, 3.6
Sp 91	Math	4215	Introduction to Probability	17/34	3.9	4.0, 4.1, 4.1
Fa 91	UW-Math	431	Intro-Theory of Probability	29	N/A	
W 92	ISyE/Math	6762	Stochastic Processes II	31/32	4.0	3.9, 4.0, 3.6
Sp 92	ISyE/Math	8100	Brownian Models of Networks	7/14	5.0	4.9, 5.0, 4.9
Fa 92	Math	4215	Introduction to Probability	20/34	3.3	3.4, 3.4, 3.4

Fa	92	ISyE/Math	6761	Stochastic Processes I	34/34	3.5	3.4, 3.8, 3.4
W	93	Math	4225	Computer Usage in Probability	5/6	4.3	4.1, 4.2, 4.4
Sp	93	Math	4216	Introduction to Statistics	17/25	3.9	3.8, 3.9, 3.8
Sp	93	ISyE	6656	Queueing Theory	19/33	3.4	3.6, 3.9, 3.5
Fa	93	Math	3720	Statistics and Applications	19	N/A	
Fa	93	ISyE/Math	8100	Multiclass Queueing Networks	7/12	4.4	4.6, 4.8, 4.5
Sp	94	ISyE	3027	Applications of Probability	40/57	3.2	3.3, 4.0, 3.4
Fa	94	ISyE	6650	Probabilistic Models	22/31	3.2	3.3, 3.7, 3.3
Fa	94	Math	3720	Statistics and Applications	22/35	2.7	2.9, 3.0, 3.1
W	95	ISyE/Math	6762	Stochastic Processes II	14/14	4.9	4.6, 4.5, 4.5
Sp	95	ISyE	6656	Queueing Theory	6/8	4.9	4.7, 4.6, 4.6
Sp	95	Math	8253	Stochastic differential equations	9/10	4.7	4.7, 4.9, 4.8
Fa	95	Math	4215	Introduction to Probability	19/26	4.2	4.1, 4.0, 4.1
W	96	ISyE	3027	Applications of Probability	33/68	3.3	3.3, 3.9, 3.9
W	96	ISyE	8101	Fluid and Brownian Models	8/9	5.0	4.7, 4.8, 4.8
Sp	96	ISyE	4104	ISyE Design I	15		N/A
sp	96	Math	3720	Statistics & Applications	20/35	3.9	3.7, 3.9, 3.8
Su	96	ISyE	4105	ISyE Design II	7/15	4.8	4.8, 4.8, 4.6
Fa	96	Math	4215	Introduction to Probability	18/31	4.5	4.2, 4.1, 4.4
Fa	96	Math/ISyE	6761	Stochastic Processes I	24/23	4.1	4.0, 4.2, 3.9
W	97	ISyE	4104	ISyE Design I	20		N/A
Sp	97	ISyE	4104	ISyE Design II	20		N/A
Sp	97	Math	4221	Probability and Applications II	4		N/A
Fa	97	ISyE	3027	Applications of Probability	36/60	3.4	3.4, 3.6, 3.5
Fa	97	Math	4220	Discrete Time Stochastic Processes	8		N/A
W	98	ISyE	3027	Applications of Probability	38/61	3.9	3.9, 3.5, 3.7
W	98	Math	4281	Intro to Stochastic Processes	8		N/A
Sp	98	ISyE	3232	Probabilistic Operations Research	22/30	3.8	3.7, 3.9, 3.7
Fa	98	Aarhus		Inventory Control (two week module)	30		N/A
W	99	Stanford	374	Queueing Systems Design and Control	9		N/A
F	99	ISyE	3232	Stochastic mfg & service systems	16/35	3.8	3.6, 4.0, 2.5
S	00	ISyE	8861	Topics in Stochastics	3/9	4.8	4.5, 4.7, 4.2
F	00	ISyE	3232	Stochastic mfg & service systems	22/60	4.7	4.4, 4.7, 4.2
S	01	ISyE	6664	Stochastic Optimization	4/12	5.0	4.8, 4.8, 4.4
F	01	ISyE	2027	Probability	18/62		sick leave

						Q#10	
S	02	ISyE	8861	Stochastic Processing Networks I	3/8	4.8	
F	02	ISyE	8861	Stochastic Processing Networks II	7/8	5.0	
S	03	ISyE	3232	Stochastic mfg & service systems	16/38	4.7	
F	03	ISyE	3232	Stochastic mfg & service systems	25/56	4.5	
S	04	ISyE	3232	Stochastic mfg & service systems	8/22	4.9	
S	05	ISyE	3232	Stochastic mfg & service systems	20/41	4.8	
S	06	ISyE	3232	Stochastic mfg & service systems	30/75	4.6	
F	06	ISyE	8861	Topics in Stochastics	7/13	4.9	
S	07	ISyE	3232	Stochastic mfg & service systems	27/80	4.9	
F	07	ISyE	3232	Stochastic mfg & service systems	15/50	4.8	
S	08	ISyE	4803	Advanced Stochastics	11/24	4.9	
F	08	ISyE	8803	Stochastic Processes III	5/10	5.0	
S	09	ISyE	3232A	Stochastic mfg & service systems	22/68	4.9	
S	09	ISyE	3232B	Stochastic mfg & service systems	21/54	5.0	
F	09	ISyE	4803h	Advanced Stochastics	20/62	4.8	
F	09	ISyE/Math	6761	Stochastic Processes I	24/36	4.8	
F	10	ISyE	8803F	Mathematics of Operations Research	12/25	4.5	
F	10	ISyE/Math	6761	Stochastic Processes 1	26/39	4.8	
S	11	ISyE	3232	Stochastic mfg & service systems	36/76	4.6	
S	11	ISyE	8861	Stochastic Processes III	5/8	5.0	
F	11	ISyE	8803F	Mathematics of Operations Research	11/22	4.4	
S	12	ISyE	4232	Advanced Stochastic Systems	29/75	4.5	

**XVII. COURSES TAUGHT AT CORNELL**

Semester	School	Course	No. of Students	
F	12	ORIE 7590	Topics in Applied Probability	13
S	13	ORIE 4520	Intro. to Engineering Stochastic Processes II	
F	13	ORIE 6540	Advanced Stochastic Processes	
S	14	ORIE 3510	Intro. to Engineering Stochastic Processes I	158
F	14	ORIE 7590	Topics in Applied Probability	
S	15	ORIE 3510	Intro. to Engineering Stochastic Processes I	
F	16	ORIE 6555	Stochastic Processing Networks	
S	17	ORIE 3510	Intro. to Engineering Stochastic Processes I	
F	17	ORIE 6590	Approximate Dynamic Programming	
S	18	ORIE 3510	Intro. to Engineering Stochastic Processes I	

## **XVIII. EXECUTIVE EDUCATION**

- Designed and delivered a short course on *Managing Variability* for Executive Masters in International Logistics at Georgia Tech, April 2011, March 2012, March 2013, and April 2014.