

## **CURRICULUM VITAE**

### **Nicholas Bambos**

Professor of Electrical Engineering  
and of Management Science & Eng.

Stanford University

February 24, 2014

Nick Bambos is Professor at Stanford University, having a joint appointment in the Department of Electrical Engineering and the Department of Management Science & Engineering. He heads the Network Architecture and Performance Engineering research group at Stanford, comprised of PhD students and visitors engaged in research projects in his Network Architecture Laboratory (NetLab). They conduct research in wireless network architectures, the Internet infrastructure, packet switching, network security and risk management, and info-service engineering. His current technology research interests include high-performance wireless and wireline network architectures, autonomic computing, and service engineering. His methodological interests are in network control, online task scheduling, queueing systems and processing networks.

He has graduated over 20 Ph.D. students, who have moved on to leadership positions in academia (Stanford, CalTech, Michigan, GaTech, NYU, UBC, Columbia, etc.) and the information technology industry (Cisco, Broadcom, IBM Labs, Qualcomm, Nokia, MITRE, Sun Labs, ST Micro, Intel, Samsung, Google, etc.) From 1999 to 2005 he served as the Director of the Stanford Networking Research Center, a partnership between Stanford and information technology industries, involving tens of corporate members, faculty and doctoral students. He is now heading a research initiative at Stanford on Networked Information Service Engineering.

He received his Ph.D. in Electrical Engineering and Computer Sciences (EECS) from the University of California at Berkeley (1989), as well as the M.S. in EECS (1987) and the M.A. in Mathematics (1989) from the same University. He graduated in Electrical Engineering from the National Technical University of Athens-Greece (1984) with first class honors. Before joining Stanford as an Associate Professor in 1996, he served as Assistant (1990-95) and tenured Associate Professor (1995-96) in the Electrical Engineering Department of the University of California at Los Angeles (UCLA).

Nick Bambos has held the Cisco Systems Faculty Development Chair (1999-2003) in computer networking at Stanford and has won the IBM Faculty Award (2002) for high-impact research in performance engineering of computer systems and networks, as well as the Griffin Award (1997). He has been the David Morgenthau Faculty Scholar (1996-99) at Stanford, and has received the National Young Investigator Award (1992) from the National Science Foundation (NSF) for research in computer networks and distributed computing architectures, as well as the NSF Research Initiation Award (1990) for studies in performance modeling of computer systems. He has also been a U.C. Regents Fellow, a David Gale Fellow, and an Earl Anthony Fellow.

He has served as editor of various research journals and on international technical committees and review panels for networking and computing technologies. He has been serving on the boards of start-up companies, as a consultant for high-technology development and management, and as an expert witness in litigation cases involving networking and computing technologies.

## EDUCATION

- **Ph.D. in Electrical Engineering and Computer Sciences**, University of California at Berkeley, 1989.
- **M.A. in Mathematics**, University of California at Berkeley, 1989.
- **M.S. in Electrical Engineering and Computer Sciences**, University of California at Berkeley, 1987.
- **Diploma in Electrical Engineering - First Class Honors**, National Technical University of Athens-Greece, 1984.

## PROFESSIONAL EXPERIENCE

- **Professor**, Department of Management Science & Engineering, and Department of Electrical Engineering, Stanford University, 2003 – present.
- **Head**, Networked Information Service Engineering (NISE) Initiative, Stanford University, 2006 - present
- **Head**, Network Architecture & Performance Engineering Lab, Stanford University, 1998 – present.
- **Director**, Stanford Networking Research Center, Stanford University, 1999 – 2005.
- **Associate Professor**, Department of Management Science & Engineering, and Department of Electrical Engineering, Stanford University, 1999 – 2003.
- **Associate Professor**, Department of Engineering-Economic Systems & Operations Research, and (courtesy appointment at) Department of Electrical Engineering, Stanford University, 1996 – 1999.
- **Associate Professor**, Department of Electrical Engineering, University of California at Los Angeles, 1995 – 1996.
- **Assistant Professor**, Department of Electrical Engineering, University of California at Los Angeles, 1989 – 1995.

## HONORS AND AWARDS

- **Best Journal Paper Award for 2011** from the IEEE Multimedia Communications Technical Committee for the paper “Channel, Deadline, and Distortion Aware Scheduling of Video Streams over Wireless Links” (with A. Dua, C. Chan, J. Apostolopoulos), IEEE Trans. on Wireless Communications, 9(3):1001-1011, 2010.
- **HP Faculty Award**, Hewlett-Packard Laboratories, Palo Alto, 2006

- **Cisco Systems Faculty Scholar**, School of Engineering, Stanford University, 1999 - 2003.
- **IBM Faculty Award**, IBM Corporation Research Labs, 2002.
- **Dana Adams Griffin Award**, School of Engineering, Stanford University, 1997.
- **David Morgenthauer Faculty Scholar**, School of Engineering, Stanford University, 1996 - 1999.
- **National Young Investigator Award**, National Science Foundation, 1992 - 1997.
- **Research Initiation Award**, National Science Foundation, 1990 - 1992.
- **EECS Departmental Scholar**, University of California at Berkeley, 1988 - 1989.
- **Regents Fellow**, University of California at Berkeley, 1986 - 1988.
- **Earl C. Anthony Fellow**, University of California at Berkeley, 1985 - 1986.
- **David and Sylvia Gale Fellow**, University of California at Berkeley, 1984 - 1985.
- **First Class Honors** for top graduating students in 1984 (among 150 students), Electrical Engineering Department, National Technical University of Athens-Greece, 1984.
- **Academic Excellence Awards** (annual), Hellenic State Scholarships Foundation, Greece, 1979 - 1984.
- **Academic Prizes** (annual), Hellenic Engineering Society, Greece, 1979 - 1984.
- **First Class Honors** for top students admitted to the University in 1979 (among tens of thousands of students participating in a national-level entrance exam), National Technical University of Athens-Greece, 1979.

#### **DISTINGUISHED INVITED LECTURES AND TALKS** (selected, recent; additional talks on pg. 19)

- *Plenary Address – A Risk Management View to Information Security*, IEEE Conference on Decision and Game Theory for Security, Berlin, Germany, Nov. 2010.
- *Keynote Address – Wireless Computing: From Infrastructure to Services*, IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), Athens, September 2007.
- *Invited Distinguished Lecture - Three Control Problems in Packet Switching*, Workshop on Mathematics of Networks, Ecole Normale Supérieure, Paris, France, June 2007.
- *Invited Distinguished Talk - Throughput and Power Issues in Packet Switches*, Center for Ultra-Broadband Information Networks, University of Melbourne, Australia, August 2007.
- *Keynote Talk - Opportunities and Challenges in Wireless Computing and Multimedia Networking*, Network Ventures Conference, Redwood Shores, CA, March 2005.

- *IBM Distinguished Talk - Resource Management and Load Balancing in Flexible Computing/Networking Service Platforms*, IBM Research Labs, Almaden, CA, June 2005
- *Distinguished Speaker - Power Control in Wireless Networks*, Wireless Industry Forum, Electrical Engineering Department, University of Texas at Austin, April 2004.
- *Plenary Talk - Power Control in Wireless Networks* and member of Panel of Experts on Network Technology Trends, IEEE Workshop on Local and Metropolitan Area Networks (LANMAN), pp. 69-74, CA, April 2004
- *Invited Lecture - Geometry of Packet Scheduling in Communication Switches*, Laboratory for Information and Decision Systems, Massachusetts Institute of Technology, Nov. 2004.
- *Plenary Talk – Next Generation Wireless System Architectures* and member of Panel of Experts on Wireless Technologies in the IEEE International Conference in Broadband Networks (BroadNets), San Jose, CA, October 2004.
- *Plenary Talk – Next Generation Wireless Data Networks: Control Plane Principles and Architectures*. Strategic Architecture Council of Sun Microsystems, Nov. 2003
- *International Expert* invited to serve on the International Evaluation Committee for network engineering research at INRIA (the French/European National Institute of Informatics and Automation of 900 scientists working in six campuses), 2003-2004.

## UNIVERSITY AND PROFESSIONAL SERVICE

- Academic Senate of Stanford University (Member), 2005 – 2010
- Committee on Research, Stanford University (Member), 2009 – 2012.
- Member the editorial boards of the Wireless Networks Journal (2001-07), Computer Networks Journal (2000-02), Queueing Systems Theory and Applications (1999-2007).
- Member of the Technical Program Committees of the various networking/computing conferences (IEEE Infocom 2000-03, IEEE Globecom 2001-03, IEEE Mobicom 2002, IEEE VTC 2003, IEEE MobiWac 2005, SpasWin 2006, BroadNets 2006-07, Wireless Broadband World Forum 2006-07, GameComm 2008)
- Technical Reviewer for several research journals in computing and networking, as well as in queueing systems and applied probability (IEEE/ACM Transactions on Networking, IEEE Tran. on Vehicular Technology, IEEE Tran. on Automatic Control, Advances in Applied Probability, Journal of Applied Probability, Annals of Applied Probability, Operations Research, Journal of the ACM, Math of OR, IEEE Trans. on Communications)
- Member of various technical panels of the National Science Foundation (NSF) and other research and technology development agencies (NSF Information Technology Research Panel, 2002; INRIA Project Evaluation Panel, 2003; NSF CAREER Panel, 2005; NSF Foundations Panel, 2006; NSF NeTS CAREER Panel, 2006; NSF FIND Panel, 2007; NSF CDI Panel, 2008).

## RESEARCH PUBLICATIONS, REPORTS, TALKS, ETC.

---

### BOOK CHAPTERS:

1. **Power Control in Wireless Networking: Basic Principles and Core Algorithms** (with S. Gitzenis). Signal Processing for Mobile Communications Handbook (M.Ibnkahla, Editor), CRC Press, 2004.
2. **Transmitter Power Control in Wireless Computing** (with S. Gitzenis). Handbook of Mobile Computing (I. Mahgoub, Editor), CRC Press, 2004.
3. **Adaptive Batch Scheduling for Packet Switching with Delays** (with K. Ross). High-Performance Packet Switching Architectures (Editors: I. Elhanany, M. Hamdi), Springer-Verlag, pp. 66-80, 2006.
4. **Geometry of Packet Scheduling: Maximal Throughput Cone Scheduling Algorithms** (with K. Ross). High-Performance Packet Switching Architectures (Editors: I. Elhanany, M. Hamdi), Springer-Verlag, pp. 82-100, 2006.
5. **Autonomic Admission Control for Networked Information Servers** (with G. Paleologo). Telecommunications Network Design and Management, Operations Research and Computer Science Interfaces, Kluwer, vol. 23, pp. 227-244, 2003

---

### JOURNAL PAPERS:

6. **BEST-AP: Non-Intrusive Estimation of Available Bandwidth and its Application for Dynamic Access Point Selection** (with P. Dely, L. Chow, N. Bayer, H. Einsiedler, C. Peylo). Computer Communications (Elsevier), 39:78-91, Jan 2014.
7. **A Software-Defined Networking Approach for Handover Management with Real-Time Video in WLANs** (with P. Dely, A. Kassler, L. Chow, N. Bayer, H. Einsiedler, C. Peylo, D. Mellado, M. Sanchez). Journal of Modern Transportation (Springer), 21:58-65, March 2013.
8. **Network Assisted Mobile Computing with Optimal Uplink Query Processing** (with C. Chan, J. Singh). IEEE Transactions on Mobile Computing, 60(6):1323-1341, Jan. 2013.
9. **Optimizing Intensive Care Unit Discharge Decisions with Patient Readmissions** (with C. Chan, V.F. Farias, G. Escobar). Operations Research (INFORMS), 60(6):1323-1341, Jan. 2013.
10. **Power and Delay Aware Management of Packet Switches** (with L. Mastroleon, D. O'Neill, B. Yolken) IEEE Transactions on Computers, , 61(12):1789-1799, Dec. 2012.
11. **Optimal State Surveillance under Observation Budget Constraints** (with P. Bommannavar). Int. Journal on Advances in Intelligent Systems, 4(4):57-67, Dec. 2011.

12. **A Scalable Delay-Power Control Algorithm for Bandwidth Sharing in Wireless Networks** (with F. Baccelli and N. Gast). IEEE/ACM Transactions on Networking, 19(5):1458-1471, October 2011.
13. **An Integrated Approach to Security Risk Management for IT-Intensive Organizations** (with Jeff Mounzer and Tansu Alpcan). Journal of Information Assurance and Security, 6(2):115-123, 2011.
14. **Channel, Deadline, and Distortion Aware Scheduling of Video Streams over Wireless Links** (with A. Dua, C. Chan, J. Apostolopoulos). IEEE Trans. on Wireless Communications, 9(3):1001-1011, March 2010.
15. **A Characterization of Max-Min SIR-Balanced Power Allocation with Applications** (with S. Stanczak, M. Kaliszan). ACM Wireless Networks, 16: 2335-2347, Nov. 2010.
16. **Game Based Capacity Allocation for Utility Computing Environments** (with B. Yolken). Telecommunications Systems Journal, pp. 1-17, May 2010.
17. **Scheduling Algorithms for Broadcasting Media with Multiple Distortion Measures**, (with C. W. Chan, S. Wee, J. Apostolopoulos), IEEE Trans. on Wireless Communications, 8(8) 4188-4199, 2009.
18. **Adaptive Data-Aware, Utility-Based Scheduling in Resource-Constrained Systems** (with D. Vengerov, L. Mastroleon, D. Murphy). Journal of Parallel and Distributed Computing, 70:871-879, 2009.
19. **Projective Cone Scheduling (PCS) Algorithms for Maximal Throughput Packet Switches** (with K. Ross). IEEE/ACM Transactions on Networking, 17(3):976-989, June 2009.
20. **Joint Task Migration and Power Management in Wireless Computing** (with S. Gitzenis). IEEE Transactions of Mobile Computing, 8(9): 1189-1204, Sept. 2009.
21. **Content-Aware Payout and Packet Scheduling for Video Streaming over Wireless** (with Y. Li, A. Markopoulou, J. Apostolopoulos) IEEE Trans. on Multimedia, 10(5):885-895, Aug. 2008.
22. **Joint Transmitter Power Control and Mobile Cache Management in Wireless Computing** (with S. Gitzenis). IEEE Transactions of Mobile Computing, 7(4):498-512, April 2008.
23. **Transmission Power and Duration-Aware Payout Control for Packetized Media Streaming over Wireless Links** (with Y. Li). Wireless Communications and Mobile Computing, 8:309-326, Jan. 2008
24. **Downlink Wireless Packet Scheduling with Deadlines** (with A. Dua). IEEE Trans. on Mobile Computing, 6(12), pp. 1410-1425, 2007.
25. **TCP Performance Dynamics and Link-Layer Adaptation Based Optimization Methods for Wireless Networks** (with J. P. Singh, Y. Li, A. Bahai, B. Xu, G. Zimmerman). IEEE Trans. Wireless Communications, 6(5), pp. 1864-1878, 2007.

26. **Transmission Power and Duration-Aware Payout Control for Packetized Media Streaming over Wireless Links** (with Y. Li). Wireless Communications and Mobile Computing, 2008.
27. **Joint Power-Payout Control for Media Streaming over Wireless Links** (with Y. Li, A. Markopoulou, J. Apostolopoulos), IEEE Transactions in Multimedia, 2006.
28. **Optimal Processor Allocation to Differentiated Job Flows** (with G. Michailidis and K. Wasserman), Performance Evaluation, v. 63(1), pp. 1-14, Jan. 2006.
29. **Queueing Networks of Random Link Topology: Stationary Dynamics of Maximum Throughput Schedules** (with G. Michailidis), Queueing Systems Theory and Applications, v. 50(1), pp. 5-52, May 2005.
30. **A Fuzzy Reinforcement Learning Approach to Power Control in Wireless Transmitters** (with D. Vengerov and H. Berenji). IEEE Trans. SMC (Part B), v. 35-4, pp. 768-778, Aug. 2005.
31. **Queuing and Scheduling in Random Environments** (with G. Michailidis). Advances in Applied Probability, vol. 36 (1), 293-317, 2004.
32. **Scheduling Optical Traffic Bursts in Time-Domain Wavelength Interleaved Optical Networks** (with K. Ross, K. Kumaran, I. Sanjeev, I. Widjaja). IEEE Journal of Selected Areas in Communications, vol. 21(9), pp. 1441-1451, 2003.
33. **Queueing Dynamics and Maximal Throughput Scheduling in Switched Processing Systems** (with M. Armony). Queueing Systems Theory and Applications, vol. 44(3), pp. 209-252, 2003.
34. **On Stability of Queueing Networks with Job Deadlines** (with A. Ward). Journal of Applied Probability, vol. 40(2), pp. 293-304, 2003.
35. **On Parallel Queueing with Random Server Connectivities and Routing Constraints** (with G. Michailidis). Probability in the Engineering and Informational Sciences, vol. 16, pp. 185-203, 2002.
36. **Optimal Control of Parallel Queues with Batch Service** (with C. Xia, G. Michailidis, P. Glynn). Probability in the Engineering and Informational Sciences, vol. 16, pp. 289-307, 2002.
37. **Power Controlled Multiple Access (PCMA) Schemes in High Performance Wireless Packet Networks** (with S. Kandukuri). IEEE Personal Communications, vol. 9(3), pp. 58-64, 2002.
38. **Dynamic Online Task Scheduling on Parallel Processors** (with C. Xia, G. Michailidis). Performance Evaluation, vol. 46, pp. 219-233, 2001.
39. **Globally Constrained Power Control Across Multiple Channels in Wireless Packet Networks** (with S. Kandukuri). ACM Mobile Networks, vol. 6(5), pp. 427-434, 2001. (invited paper)
40. **Channel Access Algorithms with Active Link Protection for Wireless Communication Networks with Power Control** (with S. Chen, G. Pottie). IEEE/ACM Transactions on Networking, vol. 8(5), pp. 583-597, 2000.
41. **On Synchronization of Poisson Processes and Queueing Networks with Service and Synchronization Nodes** (with B. Prabhakar, T. Mountford). Advances in Applied Probability, vol.

- 32(3), pp. 824-843, 2000.
42. **Power-Induced Time Division on Asynchronous Channels** (with J. Rulnick). ACM Wireless Networks, vol. 5(2), pp. 71-80, 1999. (invited paper)
  43. **Towards Power-Sensitive Network Architectures in Wireless Communications: Concepts, Issues and Design Aspects**. IEEE Personal Communications, vol. 5(3), pp. 50-59, 1998. (invited paper)
  44. **Mobile Power Management for Wireless Communication Networks** (with J. Rulnick). ACM Wireless Networks, vol. 3(1), pp. 3-14, 1997. (invited paper)
  45. **On a Singular Feature of Critical G/M/1 Queues** (with B. Prabhakar). Systems and Control Letters, vol. 28(5), pp. 239-245, 1996.
  46. **Wireless, Mobile, Multimedia Networks** (with A. Alwan, R. Bagrodia, N. Bambos, J. Cong, M. Gerla, L. Kleinrock, J. Villasenor). IEEE Personal Communications, vol. 3(2), pp. 34-51, 1996.
  47. **Convergence of Departures in Tandem Networks of  $^*/GI/Infinity$  Queues** (with B. Prabhakar, T. Mountford). Probability in the Engineering and Informational Sciences, vol. 10(4), pp. 487-500, 1996.
  48. **The Supercomputer Supernet Testbed: A WDM-Based Supercomputer Interconnect** (with L. Kleinrock, M. Gerla, J. Cong, E. Gafni, L. Bergman, J. Bannister, S.P. Monacos, T. Bujewski, P-C. Hu, B. Kannan, B. Kwan, E. Leonardi, J. Peck, P. Palnati, S. Walton). IEEE/OSA Journal of Lightwave Technology, vol. 14(6), pp. 1388-1399, 1996.
  49. **Optimal Server Allocation to Parallel Queues with Finite Capacity Buffers** (with K. Wasserman). Probability in the Engineering and Informational Sciences, vol. 10(2), pp. 279-285, 1996.
  50. **Asymptotic Optimality of Statistical Multiplexing in Pipelined Processing** (with K. Wasserman). Queueing Systems Theory and Applications, vol. 21, pp. 97-123, 1995.
  51. **OPTIMIC: A Scalable, Distributed, All-Optical Terabit Network** (with L. Kleinrock, J. Cong, E. Gafni, M. Gerla, L. Bergman, J. Bannister). Journal of High Speed Networks, vol. 4(4), pp. 407-424, 1995.
  52. **On Infinite Queueing Tandems** (with B. Prabhakar). Systems and Control Letters, vol. 23, pp. 305-314, 1994.
  53. **Optimality Aspects of Greedy Schemes in Parallel Processing of Random Graph-Structured Jobs** (with S. Chen). Probability in the Engineering and Informational Sciences, vol. 8, pp. 229-243, 1994.
  54. **On Stationary Tandem Queueing Networks with Job Feedback** (with K. Wasserman). Queueing Systems Theory and Applications, vol. 15, pp. 137-164, 1994.
  55. **Scheduling and Stability Aspects of a General Class of Parallel Processing Systems** (with J. Walrand). Advances in Applied Probability, vol. 25, pp. 176-202, 1993.



56. **On Closed Ring Queueing Networks.** Journal of Applied Probability, vol. 29(4), pp. 979-995, 1992.
57. **On Flows in Stochastic Marked Graphs** (with F. Baccelli & J. Walrand). Probability in the Engineering and Informational Sciences, vol. 5, pp. 145-157, 1991.
58. **On Stability and Performance of Parallel Processing Systems** (with J. Walrand). Journal of the Association for Computing Machinery, vol. 38(2), pp. 429-452, 1991.
59. **An Invariant Distribution for the G/G/1 Queueing Operator** (with J. Walrand). Advances in Applied Probability, vol. 22, pp. 254-256, 1990.
60. **On the Asymptotic Execution Time of Multi-Tasked Processes on Tandem Processors** (with J. Walrand). Systems and Control Letters, vol. 13, pp. 391-396, 1989.
61. **On State-Dependent Queues and Acyclic Queueing Networks** (with J. Walrand). Advances in Applied Probability, vol. 21, pp. 681-701, 1989.
62. **On Queues with Periodic Inputs** (with J. Walrand). Journal of Applied Probability, vol. 26, pp. 381-389, 1989.

---

**PEER-REVIEWED CONFERENCE PAPERS:**

63. **Distributed Smart Grid Architecture for Delay and Price Sensitive Power Management** (with N. Master, J. Mounzer), accepted to the IEEE International Communications Conference (ICC'14), Sydney, Australia, June 2014.
64. **Dynamic Resource Management in Virtualized Data Centers with Bursty Traffic** (with M. Valdez-Vivas, J. Apostolopoulos), accepted to the IEEE International Communications Conference (ICC'14), Sydney, Australia, June 2014.
65. **Power Control for Wireless Streaming with HOL Packet Deadlines** (with N. Master), accepted to the IEEE International Communications Conference (ICC'14), Sydney, Australia, June 2014.
66. **Channel Exploration for Wireless Media Streaming with Handoff and Rebuffering Control** (with L. Chow, J.P. Singh), accepted to the IEEE International Communications Conference (ICC'14), Sydney, Australia, June 2014.
67. **Channel Aware Rebuffering for Wireless Media Streaming with Handoff Control** (with L. Chow, B. Collins, P. Dely, A. J. Kassler, C. Peylo, H. J. Einsiedler, N. Bayer). Proceedings of the 2013 IEEE Global Communications Conference (GlobeCom'13), Atlanta, Georgia, December 2013.
68. **Congestion versus Accuracy Tradeoffs in IP Traffic Classification** (with M. Valdez-

- Vivas). Proceedings of the 2013 IEEE Global Communications Conference (GlobeCom'13), Atlanta, Georgia, December 2013.
69. **Playout Buffer Responsive Wireless Streaming for Multiple Clients** (with P. Bommannavar, J. Apostolopoulos). Proceedings of the 2013 IEEE Global Communications Conference (GlobeCom'13), Atlanta, Georgia, December 2013.
  70. **QoS-Aware Admission Control in Heterogeneous Data Centers** (with C. Delimitrou, C. Kozyrakis). Proceedings of USENIX International Conference on Autonomic Computing, San Jose, CA, June 2013.
  71. **Delay-Sensitive Power Management for Packet Switches** (with M. Valdez-Vivas, D. O'Neill). Proceedings of IEEE International Communications Conference (ICC'13), Budapest, Hungary, June 2013.
  72. **Latency and Energy in Quality-Driven Applications for Networked Wireless Devices** (with M. Valdez-Vivas). Proceedings of IEEE International Communications Conference (ICC'13), Budapest, Hungary, June 2013.
  73. **Resource Allocation and Scheduling for Energy Efficient Tracking** (with P. Bommannavar, J. Apostolopoulos). Proceedings of IEEE International Communications Conference (ICC'13), Budapest, Hungary, June 2013.
  74. **Deadline Aware Packet Scheduling in Switches for Multimedia Streaming Applications** (with P. Bommannavar, J. Apostolopoulos). Proceedings of IEEE International Communications Conference (ICC'13), Budapest, Hungary, June 2013.
  75. **Power Optimization in Random Wireless Networks (with A.L. Moustakas)**. Proceedings of IEEE International Symposium on Information Theory (ISIT'13), Istanbul, Turkey, July 2013.
  76. **Real-Time Physiological Stream Processing for Health Monitoring Services** (with L. Chow). Proceedings of International Conference on e-Health Networking, Applications and Services (HealthCom'13), Lisbon, Portugal, Oct. 2013.
  77. **Playout-Buffer Aware Hand-Off Control for Wireless Video Streaming** (with L. Chow, B. Collins, C. Peylo, H. Einsiedler, N. Bayer, P. Dely, A. Kassler), IEEE Global Communications Conference (GlobeComm), Los Angeles, CA, 6 pages, Dec. 2012.
  78. **Resource Constrained Failure Management in Networked Computing Systems** (with P. Bommannavar). IEEE Global Communications Conference (GlobeComm), Los Angeles, CA, 6 pages, Dec. 2012.
  79. **Approximating the Likelihood of Historical Airline Actions to Evaluate Airline Delay Cost Functions** (with M. Bloem, H. Huang). IEEE Conference on Decision and Control

- (CDC), Maui, HI, pp. 6, Dec. 2012.
80. **Power Optimization on a Network: The Effect of Randomness** (with A. Moustakas), IEEE Int. Symposium of Information Theory, pp. 606-610, June 2012.
  81. **Nonlinear Cooperative Dynamics in Distributed Power Control for Wireless Networks** (with J. Mounzer). IEEE Int. Communications Conference (ICC), pp. 5042-5047, June 2012.
  82. **Evaluation of Algorithms for a Miles-in-Trail Decision Support Tool** (with M. Bloem, D. Hattaway, and N. Bambos). Int. Conference on Research in Air Transportation, Berkeley, CA, 8 pages, May 2012.
  83. **Power Budgeted Packet Scheduling for Wireless Multimedia** (with P. Bommannavar, J. Apostolopoulos). Int. Communications Conference, pp. 2108-2113, June 2012.
  84. **Power Control in Random Networks: The Effect of Disorder in User Position** (with A. -). IEEE Int. Workshop for Spatial Stochastic Models for Wireless Networks (SPASWIN), pp. 380-385, May 2012.
  85. **Coordinated Tactical Air Traffic and Airspace Management** (with M. Bloem) IEEE Conference on Decision and Control (CDC), pp. 5287-5292, Orlando, FL, Dec. 2011.
  86. **Intrusion Detection in IT Networks with Limited Observations** (with P. Bommannavar) IEEE International Conference on Computing, Networking and Communications (ICNC), Maui, Hawaii, pp. 6, Nov. 2011.
  87. **Implementation of Fine-Grained Power/Bitrate Control for 802.11 Devices** (with Min-Wook Jeon, A. Kabani). Int. Tech. Conference on Circuits/Systems, Computers and Communications, Gyeongju, Korea, June 2011.
  88. **Security Risk Management in Computing Systems with Constraints on Service Disruption** (with P. Bommannavar), IEEE International Conference on Computer Communication Networks (ICCCN), pp. 6, Maui, Hawaii, June 2011.
  89. **Security Risk Management via Dynamic Games with Learning** (with Praveen Bommannavar and Tansu Alpcan. IEEE Int. Communications Conference (ICC), pp. 1-6, Kyoto, Japan, June 2011.
  90. **Dynamic Control and Mitigation of Interdependent IT Security Risks** (with J. Mounzer, T. Alpcan) IEEE Int. Communications Conference (ICC), pp. 1-6, Cape Town, South Africa, May 2010 (Best Paper Award).
  91. **Optimal State Surveillance under Budget Constraints** (with P. Bommannavar) Int. Conf. on Emerging Network Intelligence (Emerging'10), pp. 1-6, Florence, Italy, Oct.

2010 (Best Paper Award).

92. **Hybrid Power Control Algorithms for Streaming and Data Traffic in Wireless Networks** (with J. Mounzer) IEEE Int. Communications Conference (ICC), pp. 1-6, Cape Town, South Africa, May 2010.
93. **Integrated Security Risk Management for IT-Intensive Organizations** (with J. Mounzer, T. Alpcan) Sixth Int. Conf. on Information Assurance and Security (IAS), pp. 329-334, Atlanta, GA, Aug. 2010.
94. **Locking Dynamics and Mitigation Schemes in Distributed Power Control for Wireless Networks** (with J. Mounzer) IEEE Global Communications Conference (GlobeComm), pp. 1-6, Dec. 2010 .
95. **Fairness of Heterogeneous Queues through Cone Scheduling** (with C. Chan, M. Armony). Manufacturing and Service Operations Management Society Conference, pp. 1-3, Technion, Haifa, Israel, June 2010.
96. **Patch Scheduling for Risk Exposure Mitigation under Service Disruption Constraints** (with P. Bommannavar) 4<sup>th</sup> Int. Conf. on Emerging Security Information Systems and Technologies (SecureWare), pp. 176-181, Venice, July 2010.
97. **Admission Control for Autonomous Wireless Links with Power Constraints** (with M. Kaliszan, S. Stanczak). IEEE Int. Conf. in Acoustics Speech and Signal Processing, pp. 3138-3141, Dallas, TX, March 2010.
98. **Backlog aware scheduling for ingress memories in high-radix, single-stage switches** (with D. Tsamis, B. Yolken, W. Olesinski, H. Eberle, N. Gura). IEEE Global Com. Conference (Globecom), Honolulu, HI, pp. 1-6, Dec. 2009
99. **Throughput Loss in Task Scheduling due to Server State Uncertainty** (with C. Chan). ACM Int. Conf. in Performance Evaluation Methodologies and Tools (ValueTools), pp. 1-10, Pisa, Italy, 2009.
100. **Game Theoretic Rate Control for Mobile Devices** (with D. Tsamis, T. Alpcan). IEEE Int. Conf. on Game Theory for Networks (Gamenets), Instabul, Turkey, 2009.
101. **Dynamic Resource Modeling for Heterogeneous Wireless Networks** (with D. Tsamis, T. Alpcan, J. Singh). IEEE Int. Conf. on Communications (ICC), Dresden, Germany, pp. 1-6, 2009.
102. **Backlog aware scheduling for ingress memories in high-radix, single-stage switches** (with D. Tsamis, B. Yolken, W. Olesinski, H. Eberle, N. Gura). IEEE Global Com. Conference (Globecom), Honolulu, HI, pp. 1-6, 2009.

103. **Cost and Target-Based Scheduling for Switch Power Control** (with B. Yolken, D. Tsamis). IEEE International Conference on Communications (ICC), Dresden, Germany, 2009.
104. **Modeling Dependencies in Security Risk Management** (with T. Alpcan) ACM Int. Conf. on Risk and Security of Internet and Systems (CRiSIS), Toulouse, France, 6 pgs, 2009.
105. **A Characterization of Max-Min Power Allocation with Applications** (with Slawomir Stanczak, Michal Kaliszan, Marcin Wiczanowski). IEEE Int. Symposium on Information Theory, Seoul, Korea, 6 pgs, June 2009.
106. **Maximizing Throughput of Hospital Intensive Care Units with Patient Readmissions** (with C. W. Chan, V. F. Farias, G. J. Escobar). INFORMS Manufacturing and Service Operations Management (MSOM) Conference, Boston, MA, 5 pgs, June 2009.
107. **Target-Based Power Control for Queueing Systems with Applications to Packet Switches** (with B. Yolken, D. Tsamis). IEEE Global Telecom. Conference (Globecom), New Orleans, pp. 1-6, Dec. 2008.
108. **Security Investment Games in Interdependent Organizations** (with A. Miura, A. Yolken, J. Mitchell), Proc. 46<sup>th</sup> Allerton Conference on Communication, Control and Computing, pp. 1-10, Sept. 2008.
109. **Game Based Admission Control for Wireless Systems** (with B. Yolken) International Wireless Internet Conference (WICON), pp. 1-7, Nov. 2008.
110. **Admission Control for Power-Controlled Wireless Networks under General Interference Functions** (with S. Stanczak, M. Kaliszan), 42nd Asilomar Conference on Signals, Systems and Computers, *Monterey, USA, Oct. 2008*.
111. **Fast Power-Up Active Link Protection in Autonomous Distributed Transmitter Power Control** (with S. Gitzenis), Proc. IEEE International Wireless Communication and Computing Conference (IWCMC), pp. 1-6, Chania, Greece, Aug. 2008.
112. **Game Based Capacity Allocation for Utility Computing Environments** (with B. Yolken), Proc. GameComm, pg. 1-10, Athens, Greece, Oct. 2008.
113. **Network-Assisted Wireless Computing** (with C. Chan and J. P. Singh), Proc. IEEE PIMRC, 2008.
114. **Target-Based Power Control for Queueing Systems with Applications to Packet Switches** (with B. Yolken and D. Tsamis), IEEE Globecom, New Orleans, 2008.
115. **Security Decision-Making amongst Interdependent Organizations** (with A. Miura, B. Yolken, J. Mitchell), Proc. IEEE Computer Security Foundations Symposium (CSF), Pittsburgh, PA, 2008.
116. **Wireless Broadcasting to Diverse Users** (with C.W. Chan, S. Wee, J. Apostolopoulos). Proc. IEEE International Conference on Communications, Beijing, China, 2008.

117. **Receiver Based Optimization of Video Delivery over Wireless Links** (with C.W. Chan, S. Wee, J. Apostolopoulos), Proc. IEEE International Conference on Multimedia, 2008.
118. **Backlog Aware Scheduling for Large Buffered Crossbar Switches** (A. Dua, B. Yolken, W. Olesinski, H. Eberle, N. Gura). Proc. IEEE International Communications Conference, Beijing, China, May 2008.
119. **Target-Driven and Incentive-Aligned Power Control for Wireless Networks** (with B. Yolken), Proc. IEEE Globecom, Washington, DC, Nov. 2007.
120. **Optimal Scheduling of Media Packets with Multiple Distortion Measures** (with C.W. Chan, S. Wee, J. Apostolopoulos), Proc. IEEE International Conference on Multimedia, Beijing, China, June 2007.
121. **Power Aware Management of Packet Switches** (with L. Mastroleon, D. O'Neill, B. Yolken), Proc. IEEE Hot Interconnects, Stanford, CA, Aug. 2007.
122. **Dynamic Control Approach to Risk Mitigation in Computing Infrastructures** (with A. Miura-Ko). Proc. IEEE International Symposium on Information Assurance and Security, Manchester, UK, Aug. 2007.
123. **Backlog Aware Low Complexity Schedulers for Input Queued Packet Switches** (with A. Dua, W. Olesinski, H. Eberle, N. Gura). Proc. IEEE Hot Interconnects, pp. 39-46, Stanford, CA, 2007.
124. **Performance Tradeoffs in Mobile Computing: To Fetch or Not to Fetch?** (with A. Dua, J. Singh) Proc. ACM MobiWac, Crete, Greece, Oct. 2007.
125. **Buffer Management in Wireless Media Streaming** (with A. Dua). Proc. IEEE Globecom, Washington, DC, Dec. 2007
126. **Distributed Backlog-Driven Power Control in Wireless Networking** (with A. Dua). Proc. IEEE LanMan, Princeton, NJ, June 2007.
127. **Power Management of Packet Switches via Differentiated Delay Targets** (with B. Yolken). Proc. IEEE International Communications Conference, Beijing, China, May 2007.
128. **Power-Managed Packet Switching** (with A. Dua, B. Yolken). Proceedings of IEEE International Communications Conference (ICC'07), Glasgow, UK, 2007.
129. **Wireless Packet Scheduling with Soft Deadlines** (with A. Dua). Proceedings of IEEE International Communications Conference (ICC'07), Glasgow, UK, 2007
130. **SecureRank: An Efficient Algorithm for Prioritizing Vulnerabilities in Computing Systems** (with R. A. Miura-Ko). Proceedings of IEEE International Communications Conference (ICC'07), Glasgow, UK, 2007.
131. **Job Scheduling for Maximal Throughput in Autonomic Computing Systems** (with K. Ross), Proc. of International Workshop of Self-Organizing Systems (IWSOS), Passau, Germany, September 2006 (and in Lecture Notes in Computer Science 4124 Springer 2006)

132. **Receiver-Based Optimization for Video Delivery over Wireless Links** (with C. Chan, J. Apostolopoulos, Y. Li). Proceedings of IEEE International Conference on Multimedia (ICME'06), Toronto, Ontario, July 2006.
133. **Optimal Throughput and Routing for Wireless Link Arrays** (with F. Baccelli, C. Chan). Proceedings of Infocom 2006, 12 pages, Barcelona, Spain, April 2006.
134. **Joint Power Allocation and Scheduling for Deadline Constrained Wireless Traffic** (with A. Dua). Proceeding of IEEE Global Telecommunications Conference (GlobeCom'06), San Francisco, CA, San Francisco, Dec. 2006.
135. **Low-Jitter Scheduling Algorithms for Deadline-Aware Packet Switches** (with A. Dua) Low-Jitter Scheduling Algorithms for Deadline-Aware Packet Switches. Proceeding of IEEE Global Telecommunications Conference (GlobeCom'06), San Francisco, CA, San Francisco, Dec. 2006.
136. **Patching Rate Management for Controlled Service Disruption in Data Centers** (with L. Mastroleon, R. A. Miura-Ko). Proceeding of IEEE Global Telecommunications Conference (GlobeCom'06), San Francisco, CA, San Francisco, Dec. 2006.
137. **Packet Transmission and Content-Dependent Payout for Video Streaming over Wireless** (with Y. Li, A. Markopoulou, J. Apostolopoulos). Proceedings of IEEE Multimedia Signal Processing (MMSP'05), 10 pages, Shanghai, China, Oct. 2005.
138. **Power Management in Battery-Constrained Handheld Devices**, (with A. Markopoulou, Y. Li, C. Chan) Proceedings of IEEE International Conference on Broadband Networks (BroadNets'05), pp. 441-450, Boston, MA, Oct. 2005.
139. **Dynamic Risk Mitigation for 'Self-Defending' Network Security**, SecureComm, Athens, May 2005.
140. **On the Fairness-Delay Tradeoff in Wireless Packet Scheduling** (with A. Dua). Proceeding of IEEE Global Telecommunications Conference (GlobeCom'05), v. 5, pp. 2544-2548, St. Louis, MO, Nov. 2005.
141. **Power Control and QoS Tradeoffs for Real-Time Wireless Traffic** (with A. Dua). Proceedings of IEEE Wireless Communications and Networking Conference (WCNC'06), vol. 2, pp. 1148-1153, Las Vegas, NV, April 2006.
142. **Downlink Scheduling of Heterogeneous Traffic** (with A. Dua). Proceedings of IEEE International Conference on Communications (ICC'06), Instabul, Turkey, June 2006.
143. **Scheduling with Soft-Deadlines for Input-Queued Switches** (with A. Dua). Proc. of the 44<sup>th</sup> Allerton Conference on Communication, Computation and Control, Allerton, IL, September 2006.
144. **Cross-Layer Multi-hop Wireless Routing for Inter-vehicle Communication** (with J.P. Singh, B. Srinivasan, D. Clawin) Proceedings of IEEE International Conference on Network Testbeds and Research Infrastructures (TridentCom'06), Barcelona, Spain, March 2006.
145. **Autonomic Power Management Schemes for Internet Servers and Data Centers** (with L. Mastroleon, C. Kozyrakis, D. Economou) Proceedings of IEEE Global Communications

- Conference (GlobeCom'05), v. 2, pp. 943-947, St. Louis, MO, Nov. 2005.
146. **Power-Managed Block Level File Decryption in Wireless Network Computing** (with S.Gitzenis), Proceedings of IEEE International Symposium on Modeling and Optimization in Mobile, Ad-Hoc, and Wireless Networks (WiOpt'06), Boston, MA, April 2006.
  147. **On the Singular Behavior of a Queuing System with Random Connectivity** (with G. Michailidis). Proceedings of the IEEE Conference on Decision and Control (CDC'05) , pp. 5348-5353, Seville, Spain, Dec. 2005
  148. **Optimal Throughput and Routing for Wireless Link Arrays** (with F. Baccelli, C. Chan). Proceedings of Infocom 2006, 12 pages, Barcelona, Spain, April 2006.
  149. **A Control Formulation of the Network Security Problem via a Risk Management Approach.** Proceedings of the 2005 IEEE International Conference on Security and Privacy for Emerging Areas in Communication Networks, 3 pages, Athens, Greece, Sept. 2005.
  150. **Packet Transmission and Content-Dependent Payout for Video Streaming over Wireless** (with Y. Li, A. Markopoulou, J. Apostolopoulos). Proceedings of IEEE Multimedia Signal Processing (MMSP'05), 10 pages, Shanghai, China, Oct. 2005.
  151. **Power Management in Battery-Constrained Handheld Devices**, (with A. Markopoulou, Y. Li, C. Chan) Proceedings of IEEE International Conference on Broadband Networks (BroadNets'05), pp. 441-450, Boston, MA, Oct. 2005.
  152. **Joint Power/Payout Control Schemes for Media Streaming over Wireless Links** (with Y. Li, A. Markopoulou, J. Apostolopoulos). Proceedings of 14<sup>th</sup> IEEE Packet Video Workshop, 12 pages, Irvine, CA, Dec. 2004.
  153. **Optimizing Timeout-Based Sleep Algorithms** (with A. Markopoulou). IEEE/ACM International Symposium on Information Processing in Sensor Networks (IPSN'05), UCLA, Los Angeles, CA, April 2005.
  154. **Deadline Constrained Packet Scheduling in Wireless Networks** (with A. Dua). Proceedings of IEEE Vehicular Technology Conference VTC-F'05, v. 1, pp. 196-200, Dallas, TX, Sept. 2005.
  155. **On the Fairness-Delay Tradeoff in Wireless Packet Scheduling** (with A. Dua). Proceeding of IEEE Global Telecommunications Conference (GlobeCom'05), v. 5, pp. 2544-2548, St. Louis, MO, Nov. 2005.
  156. **Channel-State-Awareness Based Transmission Power Adaptation for Efficient TCP Dynamics in Wireless Networks** (with J.P. Singh, Y. Li) Proceedings of IEEE International Conference on Communications (ICC'05), v. 5, pp. 3553-3559, Seoul, Korea, March 2005.
  157. **Empirical Observations on Wireless LAN Performance in Vehicular Traffic Scenarios and Link Connectivity Based Enhancements for Multihop Routing** (with J.P. Singh, B. Shrinivasan, D. Clawin, Y. Yan). Proceedings of IEEE Wireless Communications and Networking Conference (WCNC'05), v. 3, pp. 1676-1682, New Orleans, LA, March 2005
  158. **Transmission Power and Payout Control for Packetized Audio Streaming over Wireless Links**, (with Y. Li) Proceedings of IEEE International Conference on Wireless Networks,



Communications and Mobile Computing, Workshop on Mobility Management and Wireless Access (MobiWac'05), v. 1, pp. 55-62, Maui, Hawaii, June 2005.

159. **Autonomic Power Management Schemes for Internet Servers and Data Centers** (with L. Mastroleon, C. Kozyrakis, D. Economou) Proceedings of IEEE Global Communications Conference (GlobeCom'05), v. 2, pp. 943-947, St. Louis, MO, Nov. 2005.
160. **Media and Data Traffic Coexistence in Power-Controlled Wireless Networks** (with S. Gitzenis). Proceedings of ACM Wireless Multimedia Networking and Performance Modeling (WMuNeP'05), pp. 78-85, Montreal, Quebec, CA, Oct. 2005.
161. **Power-Managed Block Level File Decryption in Wireless Network Computing** (with S. Gitzenis), Proceedings of IEEE International Symposium on Modeling and Optimization in Mobile, Ad-Hoc, and Wireless Networks (WiOpt'06), Boston, MA, April 2006 (accepted)
162. **Dynamic Quality of Service Control in Packet Switch Scheduling** (with K. Ross). Proceedings of IEEE International Conference on Communications (ICC'05), v. 1, pp. 396-401, Seoul, Korea, May 2005.
163. **Packet Scheduling Across Networks of Switches** (with K. Ross) Proceedings of IEEE International Conference on Networking (ICN'05), Reunion Island, April 2005.
164. **On the Singular Behavior of a Queuing System with Random Connectivity** (with G. Michailidis). Proceedings of the IEEE Conference on Decision and Control (CDC'05) , pp. 5348-5353, Seville, Spain, Dec. 2005
165. **Efficient Data Prefetching for Power-Controlled Wireless Packet Networks** (with S. Gitzenis). Proceedings of ACM/IEEE Mobile and Ubiquitous Networking Conference (MobiQuitous), pp.64-73, Boston, MA, August 22-25, 2004.
166. **Power-Controlled Packet Relays in Wireless Data Networks** (with S. Gitzenis). Proceedings of IEEE Global Communications Conference (GlobeCom), vol. 1, pp. 464-469, San Francisco, CA, December 1-5, 2003.
167. **Integrated Power Control for Circuit-Switched & Packet-Switched Traffic in Wireless Networks** (with S. Gitzenis). Proceedings of the IEEE Vehicular Technology Conference (VTC), vol. 4, pp. 2604-2609, Orlando, FL, Fall 2003.
168. **Power Control for TCP Adaptation to High-mobility Broadband Systems** (with J.P. Singh, K. Radermacher, V. Scharf-Katz). Proceedings of IEEE Vehicular Technology Conference (VTC), Los Angeles, CA, 9 pages, Fall 2004.
169. **Power-Controlled Wireless Links for Media Streaming Applications** (with Y. Li). Proceedings of the IEEE Wireless Telecommunications Symposium 2004, pp. 102-111, Pomona, CA, May 14-15, 2004
170. **Power-Controlled Media Streaming in Interference-Limited Wireless Networks** (with Y. Li). Proceedings of the 2004 IEEE International Conference in Broadband Networks, pp. 560-568, San Jose, CA, October 25-29, 2004.

171. **Power-Controlled Wireless Links for Video Streaming Applications** (with Y. Li). Proceedings of the IEEE Vehicular Technology Conference (VTC), Los Angeles, CA, 9 pages, Sept. 26-29 2004.
172. **Dynamic Quality-of-Service Control in Packet Switch Scheduling** (with K. Ross) IEEE International Conference on Communications (ICC), Seoul, Korea, 6 pages, May 2005.
173. **Local Search Scheduling Algorithms for Maximal Throughput in Packet Switches** (with K. Ross). Proceedings of the IEEE INFOCOM 2004, Hong Kong, China, 12 pages, March 7-11, 2004.
174. **Optimizing Quality of Service in Prioritized Packet Switch Scheduling** (with K. Ross). Proceedings of the IEEE International Conference on Communications (ICC), Paris, France, 5 pages, June 20-24, 2004.
175. **A Service Risk Management Approach to Capacity Protection in Optical Networks** (N. Bambos, S. Gitzenis, A. Miura, O. Gerstel, L. Paraschis). Proceedings of IEEE Workshop in Local and Metropolitan Area Networks (LANMAN'04), Mill Valley, CA, pp. 69-74, April 2004.
176. **Mobile-to-Base Task Migration in Wireless Computing** (S. Gitzenis, N. Bambos). Proceedings of IEEE Pervasive Communications Conference *PerCom* 2004, pp. 187-196, Orlando, FL, March 14-17, 2004.
177. **Distributed Power and Admission Control for Wireless Networks** (with T. Holliday, A. J. Goldsmith, P. Glynn), ISIT 2004.
178. **Dynamic Scheduling of Optical Data Bursts in Time-Domain Wavelength Interleaved Networks** (Kevin Ross, K. Kumaran, I. Saniee, I. Widjaja). Proceedings of the 11<sup>th</sup> IEEE Symposium on High-Performance Interconnects, Stanford, CA, pp. 108-113, 2003.
179. **Local/Remote Task Execution in Network Computing** (with Savvas Gitzenis). Proceedings of the International Conference on Internet Computing, IC '03, Las Vegas, NV, pp. 842-848, June 2003.
180. **Integrated Power Control for Circuit-Switched and Packet-Switched Traffic in Wireless Networks** (with S. Gitzenis). Proceedings of the IEEE Fall Vehicular Technology Conference VTC'03, Orlando, FL, vol. 4, pp. 2604-2609, Oct. 2003.
181. **Proposal and Demonstration of Link-Connectivity-Assessment-Based Enhancements to Routing in Mobile Ad-Hoc Networks** (with J. Singh, D. Clawin, B. Shrinivasan). Proceedings of the IEEE Fall Vehicular Technology Conference VTC'03, Orlando, FL, Oct. 2003.
182. **Power Management of Packet Switch Architectures with Speed Modes** (with D. O'Neill). Proceedings of the 41<sup>st</sup> Annual Allerton Conference on Communication, Control, and Computing, University of Illinois at Urbana-Champaign, Monticello, IL, Oct. 2003. (invited paper)
183. **Distributed Power Control for Time Varying Wireless Networks: Optimality and Convergence** (with T. Holliday, A. J. Goldsmith, P. Glynn), Proceedings of the 41<sup>st</sup> Annual Allerton Conference on Communication, Control, and Computing, University of Illinois at Urbana-Champaign, Monticello, IL, Oct. 2003. (invited paper)

184. **Capacity Protection/Restoration in Tree Optical Networks for Enterprise Content Distribution** (with S. Gitzenis, O. Gertsel, L. Paraschis). Proceedings of the Workshop "Protection and Restoration: from SONET/SDH to Next-Generation Networks" of IEEE Global Communications Conference (GlobeCom '03), San Francisco, CA, 2003.
185. **Power-Controlled Packet Relays in Wireless Data Networks** (with Savvas Gitzenis). Proceedings of the IEEE Global Communications International Conference (GlobeCom '03), San Francisco, CA, vol. 1, pp. 464-469, Dec. 2003.
186. **Learning Policies for Power Control in Wireless Networks.** (with D. Vengerov, H. Berenji). Proceedings of the IEEE Vehicular Technology Conference, Vancouver, BC, Canada, pp. 2390-2394, Oct. 2002.
187. **Power Efficient MAC Scheme Using Channel Probing in Multirate Wireless Ad-Hoc Networks** (with JW. Kim). Proceedings of IEEE Vehicular Technology Conference, Vancouver, BC, Canada, pp. 2382-2386, Oct. 2002.
188. **Geometry of Scheduling Algorithms for Packet Switches** (with K. Ross). Proceedings of the Allerton Conference on Communication, Control and Computing, University of Urbana-Champaign, Monticello, Illinois, Oct. 2002 (invited paper)
189. **Wireless LAN Performance Under Varied Stress Conditions in Vehicular Traffic Scenarios** (with J. Singh, B. Shrinivasan, D. Clawin). Proceedings of the IEEE Vehicular Technology Conference, Vancouver, BC, Canada, pp. 743-747, Oct. 2002.
190. **A Practical Adaptive Algorithm for Power Control in Wireless Networks** (with D. Vengerov, H. Berenji). Proceedings of the 2002 Symposium on Autonomous Intelligent Networks and Systems, University of California at Los Angeles, Los Angeles, CA, May 2002.
191. **Power-Controlled Data Prefetching/Caching in Wireless Data Networks** (with S. Gitzenis). Proceedings of the 20th IEEE Conference on Computer Communications (INFOCOM 2001), New York, NY, vol. 3, pp. 1405-1414, June 2002.
192. **Power Control for Multirate Wireless Networks with Groupwise Serial Multiuser Detection** (with J-W. Kim). Proceedings of the 2001 IEEE Global Communications Conference (GLOBECOM 2001), San Antonio, Texas, vol. 5, pp. 3201-3205, November 2001.
193. **Multi-Modal Dynamic Multiple Access (MDMA) in Wireless Packet Networks** (with S. Kandukuri). Proceedings of the 20th IEEE Conference on Computer Communications (INFOCOM 2001), Anchorage, Alaska, vol. 1, pp. 199-208, April 2001.
194. **Power Controlled Multiple Access (PCMA) in Wireless Communication Networks** (with S. Kandukuri). Proceedings of the 19th IEEE Conference on Computer Communications (INFOCOM 2000), Tel Aviv, Israel, vol. 2, pp. 386-395, March 2000.
195. **Multi-Channel Power Control for Data Traffic in Wireless Networks** (with S. Kandukuri). Proceedings of the 1999 IEEE International Workshop on Mobile Multimedia Communications (MoMuC '99), pp. 83-92, Nov. 1999.
196. **Queueing Networks with Interacting Service Resources** (with M. Armony). Proceedings of the 37<sup>th</sup> Allerton Conference on Communication, Control and Computing. Monticello, Illinois. Sept.

1999. (invited paper)

197. **Routing in Networks with Random Topologies** (with K. Scott). Proceedings of the 1997 International Communications Conference (ICC '97), vol. 2, pp. 862-866, 1997.
198. **Power Control and Time Division Multiple Access: The TDMA vs. CDMA Question** (with J. Rulnick). Proceedings of the 1997 IEEE Conference on Computer Communications (INFOCOM '97), Kobe, Japan, vol. 2, pp. 635-642, April 1997.
199. **Modeling Communication Links in Percolating Environments** (with N. Alexopoulos). Proceedings of the 1997 IEEE International Conference on Advances in Communications and Control (COMCON '97), pp. 249-261, 1997.
200. **Formation and Maintenance of Self-Organizing Wireless Networks** (K. Scott). Proceedings of the 31<sup>st</sup> Asilomar Conference on Signals, Systems and Computers, Monterey, CA, vol. 1, pp. 31-35, Nov. 1997.
201. **Algorithmic Speed-up of All Pairs Shortest paths Computation with Reconfigurable Optical Interconnection** (with S.M.P. Yip). Proceedings of the International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA '96), San Jose, CA, vol. 1, pp. 355-366, August 1996.
202. **Performance Evaluation of Power-Managed Mobile Communication Devices** (with J. Rulnick). Proceedings of the 1996 International Conference on Communications (ICC '96), Dallas, Texas, vol. 3, pp. 1477-1481, June 1996.
203. **Scalable Communication Schemes for Massively Parallel Processing Using Reconfigurable Optical Interconnects** (with S.M.P. Yip). Proceedings of the 1996 International Conference on Parallel & Distributed Systems (ICPADS '96), Tokyo, Japan, pp. 500-507, June 1996.
204. **Best Effort Bandwidth Reservation in High Speed LANs Using Wormhole Routing** (with B. Kwan, P-C. Hu, L. Kleinrock, Hong Xu, Joseph Touch). Proceeding of 5th IEEE International Conference on Computer Communications and Networks (ICCCN '96), Rockville, Maryland, 1996.
205. **Mobile Power Management for Maximum Battery Life in Wireless Communication Networks** (with J. Rulnick). Proceedings of the 1996 IEEE Conference on Computer Communications (INFOCOM '96), San Francisco, CA, vol. 2, pp. 443-450, March 1996.
206. **The Supercomputer Supernet (SSN): A High-Speed Electro-Optical Campus and Metropolitan Network** (with L. Kleinrock, J. Bannister, L. Bergman, J. Cong, E. Gafni, M. Gerla). Proceedings of the 1996 IEEE/ SPIE Conference on Optical Interconnects in Broadband Switching Architectures, San Jose, pp. 22-33, Feb. 1996.
207. **Optimal Server Allocation to Parallel Queues with Randomly Modulated Service Rates** (with G. Michailidis). Proceedings of the Conference on Information Sciences and Systems, Princeton University, Princeton, New Jersey, pp. 692-698, March 1996.
208. **Routing and Channel Assignment for Low Power Transmission in Personal Communication Systems** (with K. Scott). 1996 IEEE International Conference on Universal Personal

Communications, vol. 2, pp. 498-502, 1996.

209. **On the Stationary Dynamics of Parallel Queues with Random Server Connectivities** (with G. Michailidis). Proceedings of the 34<sup>th</sup> IEEE Conference on Decision and Control (CDC '95), New Orleans, LA, vol. 4, pp. 3638-3643, Dec. 1995.
210. **The Self-Organizing Wireless Adaptive Network (SWAN) Protocol for Communication Among Mobile Users** (with K. Scott). Proceedings of the 1995 IEEE Global Telecommunications Conference (GLOBECOM '95), Singapore, vol. 1, pp. 355-359, Nov. 1995.
211. **Channel Probing for Distributed Access Control in Wireless Communication Networks** (with S. Chen, D. Mitra). Proceedings of the 1995 IEEE Global Telecommunications Conference (GLOBECOM '95), Singapore, v. 1, pp.322-326, November 1995.
212. **Radio Link Admission Algorithms for Wireless Networks with Power Control and Active Link Quality Protection** (with S. Chen, G. Pottie). Proceedings of the 1995 IEEE Conference on Computer Communications (INFOCOM '95), Boston, MA, v. 1, pp. 97-104, June 1995.
213. **Entropy Methods for High Speed Communications** (with B. Prabhakar). Proceedings of the 1995 Conference on Information Sciences and Systems, The Johns Hopkins University, Baltimore, Maryland, , pp. 448-453, March 1995.
214. **Adaptive (T1/T2)-Multiplexing Transmission Schemes for Voice/Data Networks** (with A. Nguyen, M. Sherif) Proceedings of the 1995 IEEE International Symposium on Computers and Communications (ISCC '95), pp. 430-435, June 1995.
215. **A Distributed, Mobile, Wireless Infrastructure for Multimedia Applications** (with S. Chen, M. Gerla, J. Tsai). Proceedings of the 1995 WINLAB Conference, Rutgers University, East Brunswick, NJ, March 1995.
216. **Admission Control Schemes for Wireless Communication Networks with Adjustable Transmitter Powers** (with S. Chen, G. Pottie). Proceedings of the 1994 IEEE Conference on Computer Communications (INFOCOM '94), Toronto, Canada, vol. 1, pp. 21-28, May 1994.
217. **On Distributed Power Control for Radio Networks** (with S. Chen, G. Pottie). Proceedings of the 1994 International Communications Conference (ICC '94), New Orleans, LA, vol. 3, pp. 1281-1285, March 1994.
218. **On Power Control with Active Link Quality Protection in Wireless Communication Networks** (with S. Chen and G. Pottie). Proceedings of the 1994 Conference on Information Sciences and Systems, Princeton, NJ, pp. 426-467, March 1994.
219. **The Asymptotics of Traffic Processes in Large Queueing Networks** (with T. Mountford and B. Prabhakar). Proceedings of the 1994 Allerton Conference on Communication, Control and Computing, University of Illinois at Urbana-Champaign, Urbana, Illinois, pp. 563-572, Oct. 1994.
220. **Queueing Dynamics and Throughput of Ring Networks with Spatial Reuse** (with A. Nguyen). Proceedings of the 1993 Allerton Conference on Communication, Control and Computing, University of Illinois at Urbana-Champaign, Urbana, Illinois, pp. 576-587, Oct. 1993 (invited paper).

221. **On Parallel Processing of Random Graph Structured Jobs** (with S. Chen). Proceedings of the 1993 NSF Design and Manufacturing Systems Conference, University of North Carolina at Charlotte, Charlotte, NC, pp. 3-11, Jan. 1993.
222. **Power Control Based Admission Policies in Cellular Radio Networks** (with G. Pottie). Proceedings of the 1992 IEEE Global Telecommunications Conference (GLOBECOM '92), Orlando, Florida, vol. 2, pp. 863-867, Dec. 1992.
223. **Optimal Message Flow on Ring Networks with Spatial Reuse** (with A. Nguyen). Proceedings of the 31<sup>st</sup> IEEE Conference on Decision and Control (CDC '92), Tuscon, AZ, vol. 2, pp. 2360-2363, Dec. 1992.
224. **On Power Control in High Capacity Cellular Radio Networks** (with G. Pottie). Proceedings of the 1992 WINLAB Conference, Rutgers University, East Brunswick, New Jersey, pp. 239-247, April 1992.
225. **On Parallel Processing in Tandem Queueing Networks with Feedback**. Proceedings of the 1992 NSF Design and Manufacturing Systems Conference, Georgia Institute of Technology, Atlanta, GA, pp. 495-498, Jan. 1992.
226. **On Tandem Queueing Networks with Feedback** (with K. Wasserman). Proceedings of the 1991 Allerton Conference on Communication, Control, and Computing, University of Illinois at Urbana-Champaign, pp. 310-312, Oct. 1991.
227. **Queueing Theoretic Analysis of a General Class of Concurrent Processing Systems**. Proceedings of the 1991 NSF Design and Manufacturing Systems Conference, The University of Texas at Austin, Texas, pp. 1-5, January 1991.
228. **Maximal Throughput for Stability of a Class of Parallel Processing Systems** (with J. Walrand). Proceedings of the 29<sup>th</sup> IEEE Conference on Decision and Control (CDC '90), Honolulu, Hawaii, vol. 1, pp. 161-166, Dec. 1990.
229. **Flow Analysis of Stochastic Marked Graphs** (with F. Baccelli, J. Walrand). Proceedings of the 28<sup>th</sup> IEEE Conference on Decision and Control (CDC '89), Tampa, Florida, vol. 2, pp. 1528-1531, Dec. 1989.
230. **On Bifurcated Shortest Path Routing in Communication Networks** (with G. Stassinopoulos). Proceedings of the 1984 IEEE European Conference on Control and Communications, Patras, pp. 604-609, July 1984.

---

## REPORTS:

231. **ARQ: A Multiclass Admission Control Protocol for Heterogeneous Datacenters** (with C. Delimitrou, C. Kozyrakis). Stanford Technical Multiscale Architecture & Systems Lab. Stanford Technical Report, TR-2013-002, Jan. 2013.
232. **Adaptive Data-Aware Utility-Based Scheduling in Resource-Constrained Systems** (with D. Vengerov, L. Mastroleon, D. Murhpy). Sun Microsystems Labs Technical Report SMLI TR-2007-

164, April 2007.

- 233. **Architecting Novel Information Services and Markets**, Detecon Management Report, 2006.
- 234. **Wireless Packet Scheduling with Deadlines**. Stanford Technical Report, 2005
- 235. **Projective Processing Schedules in Queueing Structures: Applications to Packet Scheduling in Communication Networks Switches**. Stanford Technical Report. 2002.
- 236. **Network Security and Infrastructure Assurance – Architectural and Performance Engineering Issues**. Stanford Technical Report, 2004
- 237. **Noninvasive Channel Probing for Distributed Admission Control and Channel Allocation in Wireless Networks** (with J-W. Kim, D. Mitra, S. Chen). Stanford Technical Report, 2002
- 238. **Power-Controlled Data Prefetching and Caching in Wireless Mobile Networking** (with S. Gitzenis). Stanford Technical Report, 2002.
- 239. **Queueing Networks with Random Link Topologies; Stationary Dynamics of Maximal Throughput Schedules** (with G. Michailidis). Stanford Technical Report, 2001.
- 240. **On Stationary Multi-Processor Queues with Threshold-Based Server Activation** (with J. Rulnick). Technical Report: NetLab 1997-09-01, Stanford University, 1997.
- 241. **Convergence of Departures in Tandem Networks of  $\text{GI}/\text{Infinity}$  Queues** (with T. Mountford, B. Prabhakar). Technical Report: HPL-BRIMS-96-15, BRIMS, HP Labs, UK, 1996.
- 242. **Processor Migration in Distributed Queueing: An Analysis of the two Processor Case** (with K. Scott). Technical Report UCLA-ENG-95-138, School of Engineering and Applied Science, UCLA, 1995.
- 243. **Multicopy Parallel Processing Networks: Throughput Analysis** (with K. Scott). Technical Report UCLA-ENG-95-137, School of Engineering and Applied Science, UCLA, 1995.
- 244. **Critical Phenomena in Massively Parallel Processing Networks: Throughput Analysis - Initial Results** (with A. Zarkesh). Technical Report UCLA-ENG-95-141, School of Engineering and Applied Science, UCLA, 1995.
- 245. **A Fully Distributed Algorithm for the Creation and Maintenance of Wireless Networks of Mobile Users** (with K. Scott). Technical Report UCLA-ENG-95-112, Department of Electrical Engineering, University of California at Los Angeles, 1995
- 246. **Probing the Collective Behavior of Massively Parallel Processing Systems by the Renormalization Group Method** (with A. Zarkesh). Technical Report UCLA-ENG-95-140, School of Engineering and Applied Science, UCLA, 1995.
- 247. **Performance of a Switch State Dependent Timeout Scheme in a Wormhole Switching LAN** (with B. Kwan). UCLA Technical Report UCLA-ENG-95-121, School of Engineering and Applied Science, UCLA, 1995.

248. **Branching Processes in Rollback Synchronization of Parallel Processing Systems: Structural Results** (with J. Rulnick). Technical Report UCLA-ENG-95-136, School of Engineering and Applied Science, UCLA, 1995.
249. **Optimal Choice of Queue Length Thresholds for Processor Activation in the M/M/K Queue** (with J.M. Rulnick). Technical Report UCLA-ENG-95-134, School of Engineering and Applied Science, UCLA, 1995.
250. **Partial Worm Retraction Routing Scheme for Wormhole Switching LANs** (with B. Kwan). UCLA Technical Report UCLA ENG-94-108, November 1994.
251. **Admission Control and Routing Protocols in Stationless Multi-Hop Radio Networks** (with K. Scott). Technical Report UCLA-ENG-94-106, School of Engineering and Applied Science, U.C. Los Angeles, 1994.
252. **Optimistic (Partial Retraction) Routing Schemes for Wormhole Switching LANs** (with B. Kwan). Technical Report UCLA-ENG-94-108, School of Engineering and Applied Science, U.C. Los Angeles, 1994.
253. **Radio Link Admission Algorithms for Wireless Networks with Power Control and Active Link Quality Protection** (with S. Chen, G. Pottie). Technical Report UCLA-ENG-94-25. School of Engineering and Applied Science, U.C. Los Angeles, 1994.
254. **Distributed Dynamic Power Control Schemes in High Capacity Wireless Radio Networks** (with S. Chen, G. Pottie). Technical Report UCLA-ENG-93-57, School of Engineering and Applied Science, U.C. Los Angeles, 1993.
255. **A Localized Power and Admission Control Scheme Adapted to Varying Channel Conditions for High Capacity Wireless Radio Networks** (with S. Chen, G. Pottie). Technical Report UCLA-ENG-93-56, School of Engineering and Applied Science, U.C. Los Angeles, 1993.
256. **Admission Control Schemes for Guaranteed Link Quality in High Capacity Cellular Radio Networks** (with S. Chen, G. Pottie). Technical Report UCLA-ENG-93-55, School of Engineering and Applied Science, U.C. Los Angeles, 1993.
257. **On Generalized Multiserver Queues** (with J. Walrand). Technical Report UCLA-ENG-9-24-90, School of Engineering and Applied Science, U.C. Los Angeles, 1990.
258. **Recent Results on the Asymptotic Behavior of Concurrent Processing Systems Under Stationary and Ergodic Inputs** (with J. Walrand). Technical Report UCB/ERL M88/78, Electronics Research Laboratory, U.C. Berkeley, 1988.
259. **An Alternative Approach to the Asymptotic Makespan of Serially Executed Multitasked Jobs** (with J. Walrand). Technical Report UCB/ERL M88/79, Electronics Research Laboratory, U.C. Berkeley, 1988.

---

**TALKS:**



1. **Distinguished Invited Seminar: Power and Throughput Issues in Next-Generation Packet Switches**, National Technical University of Athens, Greece, Feb. 2009.
2. **Distinguished Invited Seminar: Wireless Multimedia Computing**, DoCoMo Research Labs, Palo Alto, Feb. 2009.
3. **Plenary Talk: Architecting Novel Information Services and Markets**, 4<sup>th</sup> International IMS Workshop, Fraunhofer Institute for Open Communication Systems – FOKUS, Berlin, Germany, Nov. 2008.
4. **Video Streaming over Wireless Networks – Control Architectures and Performance Engineering**, NEC Research Labs, Tokyo, July 2008.
5. **Power Management in Networking and Computing**, Hitachi Labs, Tokyo, July 2008.
6. **Power Management of Packet Switches**, Sun Labs, Menlo Park, April 2008.
7. **Power and Throughput Issues in Next-Generation Packet Switches**, UC Irvine, February 2008.
8. Invited Distinguished Lectures: 1) **Robust Maximal Throughput Schedules in Processing Systems**, 2) **Transmitter Power Control in Wireless Multimedia Networking**, Advanced Network Sciences Institute, University of California, San Diego, August 2008.
9. **Autonomous Admission (and Power) Control in Wireless Networking**, Technical University of Berlin, December 2007.
10. **Video Streaming over Wireless Networks – Control Architectures and Performance Engineering**, Samsung Labs, Santa Clara, December 2008.
11. **Geometry of Resource Allocation and Load Balancing in Computing/Networking**, Stanford OR Seminar, November 2007.
12. **Throughput and Power Issues in Packet Switching**, University of Sydney, Australia, August 2007.
13. **Video Streaming over Wireless Networks – Control Architectures and Performance Engineering**, Bogazici University, Istanbul, Turkey, August 2007.
14. **Outsourcing in Computing and Data Storage Services**, Deutsche Telekom Laboratories, Berlin, August 2007.
15. **Dynamic Control of Packet Switches**, Sun Labs, Menlo Park, February 2007.
16. **Geometry of Resource Allocation and Load Balancing in Computing/Networking**, Deutsche Telekom Laboratories, Berlin, January 2007.
17. **Network Control Issues in Video Transmission and Distribution**, Deutsche Telekom Labs, August 2006.
18. **Power Control in Wireless Networks**, IBM Research Labs, Hawthorne, July 2006.

19. **Scheduling and Power Management Issues in Data Centers and High-Performance Computing**, Sun Labs, Menlo Park, May 2006.
20. **Video Streaming over Wireless Networks – Control Architectures and Performance Engineering**, Athens Information Technology Institute, May 2006.
21. **Power Control in Wireless Networks**, ENS, Paris.
22. **Video Streaming over Wireless Networks – Control Architectures and Performance Engineering**, Technical University of Athens, December 2005.
23. **Geometry of Resource Allocation and Load Balancing in Computing/Networking**, Athens University of Economics and Business, November 2005.
24. **Power Control in Wireless Networks**, Sprint Labs, Burlingame, December 2004.
25. **‘Geometry’ of Packet Scheduling in Communication Switches**, MIT LIDS Seminar, November 2004.
26. **Power(Rate)/Playout-Controlled Video over Wireless**, France Telecom Research Labs, Paris, June 2004.
27. **Next-Generation Wireless Data/Media Networks**, Athens Information Technology Institute, February 2004.
28. **Projective Packet Scheduling in Switching Systems**, France Telecom Research Labs, Paris, February 2004.
29. **Next-Generation Wireless Data/Media Networks**, France Telecom Research Labs, February 2004.
30. **Geometry of Packet Scheduling Algorithms for Input-Queued Communication Switches**. INFORMS Conference, San Jose, CA, Nov. 2002.
31. **Adaptive Admission Control for Multiclass Web Servers** (with G. Paleologo). INFORMS Telecommunications Conference, Boca Raton, FL, March 2002.
32. **Power-Controlled Data (Pre)Fetching and Caching in Wireless Networking** (with S. Gitzenis). INFORMS Telecommunications Conference, FL, March 2002.
33. **On Stability of Queueing Networks with Job Deadlines** (with A. Ward). INFORMS Applied Probability Conference, New York City, NY, July 2001.
34. **Throughput Maximizing Properties of Statistical Multiplexing in Stationary Ergodic Networks with Feedback** (with C. Westphal). INFORMS Applied Probability Conference, New York City, NY, July 2001.
35. **Predictive Caching Techniques in Wireless Networks** (with A. Ward). INFORMS Telecommunications Conference, Boca Raton, FL, March 2000.

36. **Dynamic Cone Policies for Skilled Based Routing in Call Centers** (with M. Armony). INFORMS Telecommunications Conference, Boca Raton, FL, March 2000.
37. **Dynamic Cone Policies for Queueing Networks with Interfering Resources** (with M. Armony). INFORMS Conference, Philadelphia, PA, November 1999.
38. **Stability and Performance Issues of a General Heterogeneous Parallel Processing System** (with G. Michailidis, K. Wasserman, S. Akin). INFORMS Applied Probability Conference, Ulm, Germany, July 1999.
39. **Bandwidth Allocation in Wireless Networks** (with G. Michailidis). INFORMS Conference, Seattle, WA, October 1998.
40. **Stability and Large Buffer Asymptotics of a General Parallel Processing System** (with G. Michailidis, K. Wasserman, S. Akin). Conference of the Canadian Operational Research Society, Windsor, Ontario, June 1999.
41. **Dynamic Cone Policies for Queueing Networks with Interfering Resources** (with M. Armony). INFORMS Conference, Philadelphia, PA, November 1999.
42. **Power Control and QoS in Wireless Communication Networks** (with M. Armony). INFORMS Conference, Cincinnati, OH, May 1999.
43. **Scheduling Algorithms for High Performance Switches** (with S. Yip). INFORMS Conference, Seattle, WA, Oct. 1998.
44. **Bandwidth Allocation in Wireless Networks** (with G. Michailidis). INFORMS Conferences., Seattle, WA, October 1998.
45. **Queueing in Interfering Resource Environments** (with M. Armony). INFORMS Conference, Tel Aviv, Israel, June 1998.
46. **Allocation of Interdependent Resources in Queueing Systems with Applications to Wireless Networks** (with M. Armony). INFORMS Telecommunications Conference, Boca Raton, FL, March 1998.
47. **On Performance and Limitations of Ultra Large Scale Digital Interconnects with Reconfigurable Topologies** (with S. Yip). IEEE/LEOS Conference on Interconnection of High Speed Digital Systems, Santa Fe, NM, May 1997.
48. **Queueing in Random Environments** (with G. Michailidis). INFORMS Applied Probability Conference, Boston, MA, June 1997.
49. **Network Flows in Random Environments** (with G. Michailidis). INFORMS Applied Probability Conference, Atlanta, GA, June 1995.
50. **On Queueing Networks with Random Link Topologies** (with G. Michailidis). INFORMS Telecommunications Conference, Boca Raton, FL, March 1995.

51. **Power Control Issues in Wireless Networks** (with S. Chen, G. Pottie). INFORMS Telecommunications Conference, Boca Raton, FL, March 1995.
52. **The Entropy and Delay of Traffic Processes in ATM Networks** (with B. Prabhakar). 1995 IEEE Information Theory Workshop on Multiple Access and Queueing, St. Louis, Missouri, April 1995.
53. **Scalable Supercomputer Network** (with L. Kleinrock, N. Bambos, L. Bergman, J. Cong, E. Gafni, M. Gerla). 1994 IEEE Gigabit Networking Workshop, Toronto, Canada, June 1994.
54. **The Supercomputer Supernet Hardware Design** (with L. Kleinrock, N. Bambos, L. Bergman, J. Cong, E. Gafni, M. Gerla). DARPA Networking Systems Meeting, Santa Fe, NM, September 1994.
55. **Dynamics of Parallel Processing: A Non-Causal Queue** (with J. Rulnick). Annual meeting of the Society of Industrial and Applied Mathematics (SIAM), San Diego, CA, July 1994.
56. **On the Synchronization of Poisson Processes and Queueing Networks with Synchronization Nodes** (with B. Prabhakar and T. Mountford). Fifth Workshop on Stochastic Analysis and Related Fields, Silivri, Turkey, July 1994.
57. **On Flow Control in Ring Structured Local Area Networks with Spatial Reuse** (with A. Nguyen). INFORMS Telecommunications Conference, Boca Raton, Florida, March 1992.
58. **Stable Policies for Processing Systems with Precedence Constraints**. ORSA/TIMS Joint National Meeting, Anaheim, California, November 1991.
59. **On Stability of Parallel Processing Systems** (J. Walrand). SIAM Conference on Applied Probability in Science and Engineering, New Orleans, LA, March 1990.
60. **State-Dependent Queues and Queueing Networks** (with J. Walrand). International Conference on Stochastic Programming, Ann Arbor, MI, August 1989.
61. **Recent Developments in Power Control and their Impact on Next-Generation Dense Wireless Network** (invited distinguished talk). Wireless/Sensor Network Track of the 2002 IEEE Wireless Communications and Networking Conference (WCNC 2002), Orlando, Florida, March 2002.
62. **Power Control and Management Issues in Next-Generation Wireless Networks** (invited keynote talk). 2001 IEEE Symposium on Ad Hoc Wireless Networks (SAWN 2001) of the 2001 IEEE Global Communications Conference (GLOBECOM 2001), San Antonio, Texas, November 2001.
63. **Queueing Models and Problems in Wireless Network Control** (invited plenary talk). Stochastic Networks Conference, Madison, WI, June 2000.
64. **Power Controlled Multiple Access (PCMA) in Wireless Networking** (invited talk). IEEE Computer Communications Workshop, Estes Park, Colorado, November 1999.
65. **Queueing Networks with Interdependent Resources** (invited plenary talk). Oberwolfach Workshop on Applied Probability,, Mathematisches Forschungsinstitut, Oberwolfach, Germany, December 1998.
66. **Power Control Issues in Wireless Communication Networks** (invited plenary talk). Workshop on System and Control Issues in Communication Networks, National Science Foundation and Army

Research Office, Airlie Center, Airlie, Virginia, August 1996.

67. **On Queueing Networks with Random Link Topologies: Bandwidth Allocation in Wireless Communication Networks** (invited plenary talk). BRIMS Workshop on Mathematical Trends in Communication Networks, Hewlett-Packard Labs, Bristol, UK, June 1996.
68. **Power Control with Active Link Protection in Wireless Networking** (invited plenary talk). EPFL Workshop on Computer Networking, EPFL, Switzerland, Summer 1996.
69. **Power Control Algorithms in High Performance Wireless Networks** (invited talk). Networking Seminar, IBM Watson Research Center, NY, July 2001.
70. **Queueing Networks in Random Environments** (invited talk). Networking Seminar, Dept. of EECS, U.C. Berkeley, March 1998.
71. **On Queueing Networks with Randomly Modulated Service Rates** (invited talk). Research Colloquium, Center for Operations Research, MIT, September 1997.
72. **High-Performance Wireless Networking**. Networking Seminar, Dept. of EECS, U.C. Berkeley, Nov. 1996