# Curriculum Vitae: Jason Xiaowen Liu

(Last updated: November 2, 2012)

#### **EDUCATION**

Ph.D.	Dartmouth College, USA	2003
M.S.	College of William & Mary, USA	2000
B.S.	Beijing University of Technology, China	1993

## FULL-TIME ACADEMIC EXPERIENCE

## Florida International University (FIU)

Associate Professor	2011 – current
Assistant Professor	2007 - 2011
Colorado School of Mines (CSM)	
Assistant Professor	2004 - 2007
University of Illinois, Urbana-Champaign (UIUC)	
Postdoctoral Research Associate	2003 - 2004

## PART-TIME ACADEMIC EXPERIENCE

## **Dartmouth College**

Graduate Research/Teaching Assistant	1996 - 2003
College of William and Mary	
Graduate Research Assistant	1995 – 1996

## NON-ACADEMIC EXPERIENCE

# **Institute for Security Technology Studies, Dartmouth College**

Research Scientist 2003

Icon Technologies, China

Co-founder & Chief Computer Engineer 1993 – 1994

Institute of Mathematics, China Academy of Science

Research Intern 1993

#### **JOURNAL PUBLICATIONS**

- 1. A rate-based TCP traffic model to accelerate network simulation. Ting Li, Nathanael Van Vorst, and Jason Liu, *Transactions of the Society for Modeling and Simulation International*, accepted for publication, 2012.
- 2. **OpenFlow based flow level bandwidth provisioning for CICQ switches.** Hao Jin, Deng Pan, Jason Liu, and Niki Pissinou, *IEEE Transactions on Computers*, accepted for publication, 2012.
- 3. **PrimoGENI for hybrid network simulation and emulation experiments in GENI.** Nathanael Van Vorst, Miguel Erazo, and Jason Liu, *Journal of Simulation*, 6:179-192, 2012. DOI: 10.1057/JOS.2012.5.
- 4. **A model-driven emulation approach to large-scale TCP performance evaluation.** Miguel A. Erazo, and Jason Liu. *International Journal of Communication Networks and Distributed Systems (IJCNDS)*, 5(1/2):130-150, 2010. DOI: 10.1504/IJCNDS.2010.033971.

- 5. **Real-time network simulation support for scalable routing experiments.** Yue Li, Jason Liu, and Raju Rangaswami. *International Journal of Simulation and Process Modelling, Special Issue on Parallel and Distributed Simulation*, 5(2):146-156, 2009. DOI: 10.1504/IJSPM.2009.028627.
- 6. **Parallel hybrid network traffic models**. Jason Liu and Yue Li. *Simulation: Transactions of the Society for Modeling and Simulation International*, 85(4):271-286, 2009. DOI: 10.1177/0037549708099996.
- 7. A real-time network simulation infrastructure based on OpenVPN. Jason Liu, Yue Li, Nathanael Van Vorst, Scott Mann, and Keith Hellman, *Journal of Systems and Software*, 82(3):473-485, 2009. DOI: 10.1016/J.JSS.2008.08.015.
- 8. **On the performance of a hybrid network traffic model**. Jason Liu and Yue Li. *Simulation Modelling Practice and Theory*, 16(6):656-669, 2008. DOI: 10.1016/J.SIMPAT.2008.04.007.
- 9. **Experimental evaluation of wireless simulation assumptions.** Calvin Newport, David Kotz, Yougu Yuan, Robert S. Gray, Jason Liu, and Chip Elliott. *Simulation: Transactions of the Society for Modeling and Simulation International*, 83(9):643-661, 2007. DOI: 10.1177/0037549707085632.
- 10. **RINSE:** the real-time immersive network simulation environment for network security exercises (extended version). Michael Liljenstam, Jason Liu, David Nicol, Yougu Yuan, Guanhua Yan, and Chris Grier. *Simulation: Transactions of the Society for Modeling and Simulation International*, 82(1):43-59, 2006. DOI: 10.1177/0037549706065544.
- 11. Empirical validation of wireless models in simulations of ad hoc routing protocols. Jason Liu, Yougu Yuan, David M. Nicol, Robert S. Gray, Calvin C. Newport, David Kotz, and Luiz Felipe Perrone. *Simulation: Transactions of the Society for Modeling and Simulation International*, 81(4):307-323, 2005. DOI: 10.1177/0037549705055017.
- 12. Composite synchronization in parallel discrete-event simulation. David M. Nicol and Jason Liu. *IEEE Transactions on Parallel and Distributed Systems*, 13(5):433-446, May 2002. DOI: 10.1109/TPDS.2002.1003854.

#### CONFERENCE/WORKSHOP PUBLICATIONS

- 1. **Depth-first worst-fit search based multipath routing for data center networks.** Tosmate Cheocherngngarn, Hao Jin, Jean Andrian, Deng Pan, and Jason Liu, *Proceedings of the 2012 IEEE Global Communications Conference (GLOBECOM 2012)*, Anaheim, CA, December 2012. To appear.
- 2. **Hierarchical composite synchronization.** Jason Liu and Rong Rong, *Proceedings of the 26th Workshop on Principles of Advanced and Distributed Simulation (PADS 2012)*, Zhangjiajie, China, July 2012, pp. 3-12.
- 3. **Realizing large-scale interactive network simulation via model splitting.** Nathanael Van Vorst and Jason Liu, *Proceedings of the 26th Workshop on Principles of Advanced and Distributed Simulation (PADS 2012)*, Zhangjiajie, China, July 2012, pp. 120-129.
- 4. Toward comprehensive and accurate simulation performance prediction of parallel file systems. Miguel Erazo, Ting Li, Jason Liu and Stephan Eidenbenz,

- Proceedings of the 42nd Annual IEEE/IFIP International Conference on Dependable Systems and Networks (DSN 2012), Boston, MA, June 2012, 12 pages.
- 5. **Simulation studies of OpenFlow-based in-network caching strategies.** Ting Li, Nathanael Van Vorst, Rong Rong, and Jason Liu, *Proceedings of the 15th Communications and Networking Simulation Symposium (CNS 2012).* Orlando, FL, March 2012. 6 pages.
- 6. How low can you go? Spherical routing for scalable network simulations. Nathanael Van Vorst, Ting Li, and Jason Liu, *Proceedings of the 19th Annual Meeting of the IEEE International Symposium on Modeling, Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS 2011)*, Raffles Hotel, Singapore, July 2011, pp. 259-268.
- 7. **PrimoGENI: integrating real-time network simulation and emulation in GENI,** Nathanael Van Vorst, Miguel Erazo, and Jason Liu. *Proceedings of the 25th Workshop on Principles of Advanced and Distributed Simulation (PADS 2011)*, Nice, France, June 2011, 9 pages.
- 8. **OpenFlow based flow level bandwidth provisioning for CICQ switches**. Hao Jin, Deng Pan, Jason Liu, and Niki Pissinou, *Proceedings of 2011 IEEE International Conference on Computer Communications (INFOCOM 2011) Mini-Conference*, Shanghai, China, April 2011, 476-480.
- 9. **Model-driven network emulation with virtual time machine.** Jason Liu, Raju Rangaswami, and Ming Zhao. *Proceedings of the 2010 Winter Simulation Conference (WSC 2010)*, Baltimore, MD, USA, December 2010, pp. 688-696.
- 10. On enabling real-time large-scale network simulation in GENI: The PrimoGENI approach (poster abstract). Miguel A. Erazo and Jason Liu, *Proceedings of the 3rd International ICST Conference on Simulation Tools and Techniques (SIMUTools 2010)*, Torremolinos, Malaga, Spain, March 2010, 2 pages.
- 11. A large-scale real-time network simulation study using PRIME. Jason Liu, Yue Li, and Ying He, *Proceedings of the 2009 Winter Simulation Conference (WSC'09)*, Austin, TX, USA, December 2009, pp. 797-806.
- 12. **Real-time security exercises on a realistic interdomain routing experiment platform.** Yue Li, Michael Liljenstam, and Jason Liu. *Proceedings of the 23rd Workshop on Principles of Advanced and Distributed Simulation (PADS'09)*, Lake Placid, NY, USA, June 22-25, 2009, pp. 54-63.
- 13. **A fluid background traffic model**. Ting Li and Jason Liu. *Proceedings of the 2009 IEEE International Conference on Communications (ICC'09)*, Dresden, Germany, June 14-18, 2009, 5 pages.
- 14. **SVEET!** A scalable virtualized evaluation environment for TCP. Miguel Erazo, Yue Li, and Jason Liu. *Proceedings of the 5th International Conference on Testbeds and Research Infrastructures for the Development of Networks and Communities (TridentCom'09)*, Washington DC, USA, April 6-8, 2009, 10 pages.
- 15. **Toward scalable routing experiments with real-time network simulation**. Yue Li, Jason Liu, and Raju Rangaswami. *Proceedings of the 22nd Workshop on Principles of Advanced and Distributed Simulation (PADS'08)*, Rome, Italy, June 3-6, 2008, pp. 23-30.

- 16. **Interval branching**. Patrick Peschlow, Peter Martini, and Jason Liu. *Proceedings of the 22nd Workshop on Principles of Advanced and Distributed Simulation (PADS'08)*, Rome, Italy, June 3-6, 2008, pp. 99-108.
- 17. A primer for real-time simulation of large-scale networks. Jason Liu. *Proceedings of the 41st Annual Simulation Symposium (ANSS'08), part of the 2008 Spring Simulation Multiconference*, Ottawa, Canada. April 14-16, 2008, pp. 85-94.
- 18. Immersive real-time large-scale network simulation: a research summary. Jason Liu. *Proceedings of the 22nd IEEE International Parallel and Distributed Processing Symposium (IPDPS'08), NSF NGS Workshop*, Miami, Florida, April 13-14, 2008, 5 pages.
- 19. **Parallel simulation of hybrid network traffic models**. Jason Liu. *Proceedings of the 21st Workshop on Principles of Advanced and Distributed Simulation (PADS'07)*, San Diego, CA, USA, June 12-15, 2007, pp. 141-151.
- 20. An open and scalable emulation infrastructure for large-scale real-time network simulations. Jason Liu, Scott Mann, Nathanael Van Vorst, and Keith Hellman. *Proceedings of INFOCOM 2007 MiniSymposium*, Anchorage, AK, USA, May 6-12, 2007, pp. 2471-2475.
- 21. Packet-level integration of fluid TCP models in real-time network simulation. Jason Liu. *Proceedings of the 2006 Winter Simulation Conference (WSC'06)*, Monterey, CA, USA, December 2-5, 2006, pp. 2162-2169.
- 22. Advanced concepts in large-scale network simulation. David M. Nicol, Michael Liljenstam and Jason Liu. *Proceedings of 2005 Winter Simulation Conference (WSC'05)*, Orlando, FL, USA, December 4-7, 2005, pp. 153-166.
- 23. RINSE: the real-time interactive network simulation environment for network security exercises. Michael Liljenstam, Jason Liu, David Nicol, Yougu Yuan, Guanhua Yan, and Chris Grier. *Proceedings of the 19th Workshop on Principles of Advanced and Distributed Simulation (PADS'05)*, Monterey, CA, USA, June 1-3, 2005, pp. 119-128.
- 24. Outdoor experimental comparison of four ad hoc routing algorithms. Robert S. Gray, David Kotz, Calvin C. Newport, Nikita Dubrovsky, Aaron Fiske, Jason Liu, Christopher Masone, Susan McGrath, and Yougu Yuan. *Proceedings of the 7th ACM/IEEE International Symposium on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWiM'04)*, Venice, Italy, October 4-6, 2004, pp. 220-229.
- 25. Experimental evaluation of wireless simulation assumptions. David Kotz, Calvin Newport, Robert S. Gray, Jason Liu, Yougu Yuan, and Chip Elliott. *Proceedings of the 7th ACM/IEEE International Symposium on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWiM'04)*, Venice, Italy, October 4-6, 2004, pp. 78-82.
- 26. **Simulation validation using direct execution of wireless ad-hoc routing protocols.** Jason Liu, Yougu Yuan, David M. Nicol, Robert S. Gray, Calvin C. Newport, David F. Kotz, and Luiz Felipe Perrone. *Proceedings of the 18th Workshop on Parallel and Distributed Simulation (PADS'04)*, Kufstein, Austria, May 16-19, 2004, pp. 7-16.
- 27. Development of an Internet backbone topology for large-scale network simulations. Michael Liljenstam, Jason Liu, and David M. Nicol. *Proceedings of the*

- 2003 Winter Simulation Conference (WSC'03), New Orleans, LA, USA, December 7-10, 2003, pp. 694-702.
- 28. **Simulation of large-scale networks using SSF.** David M. Nicol, Jason Liu, Michael Liljenstam, and Guanhua Yan. *Proceedings of the 2003 Winter Simulation Conference (WSC'03)*, New Orleans, LA, USA, December 7-10, 2003, pp. 650-657.
- 29. Multiscale modeling and simulation of worm effects on the Internet routing Infrastructure. David M. Nicol, Michael Liljenstam, and Jason Liu. *Proceedings of the 13th International Conference on Modeling Techniques and Tools for Computer Performance Evaluation (Performance TOOLS 2003)*, Urbana, IL, USA, September 2-5, 2003, pp. 1-10.
- 30. An implementation of the SSF Scalable Simulation Framework on the Cray MTA. Robert R. Henry, Simon H. Kahan, Jason Liu, David M. Nicol. *Proceedings the 17th Workshop on Parallel and Distributed Simulation (PADS'03)*, San Diego, CA, USA, June 10-13, 2003, pp. 77-85.
- 31. Lookahead revisited in wireless network simulations. Jason Liu and David M. Nicol. *Proceedings of the 16th Workshop on Parallel and Distributed Simulation (PADS'02)*, Washington, DC, USA, May 12-15, 2002, pp. 79-88.
- 32. **Towards high performance modeling of the 802.11 wireless protocol.** Jason Liu, David M. Nicol, Luiz Felipe Perrone, and Michael Liljenstam. *Proceedings of the 2001 Winter Simulation Conference (WSC'01)*, Arlington, VA, USA, December 9-12, 2001, pp. 1315-1320.
- 33. **Simulation modeling of large-scale ad-hoc sensor networks.** Jason Liu, Felipe Perrone, David M. Nicol, Chip Elliot, and David Pearson. *Proceedings of the European Simulation Interoperability Workshop 2001 (Euro-SIW'01)*, London, England, June 25-27, 2001, 12 pages.
- 34. Lock-free scheduling of logical processes in parallel simulation. Jason Liu, David M. Nicol, and King Tan. *Proceedings of the 15th Workshop on Parallel and Distributed Simulation (PADS'01)*, Lake Arrowhead, CA, USA, May 15-18, 2001, pp. 22-31.
- 35. Learning not to share. Jason Liu and David M. Nicol. *Proceedings of the 15th Workshop on Parallel and Distributed Simulation (PADS'01)*, Lake Arrowhead, CA, USA, May 15-18, 2001, pp. 46-55.
- 36. **Safe timestamps and large-scale modeling.** David M. Nicol, Jason Liu, and James Cowie, *Proceedings of the 14th Workshop on Parallel and Distributed Simulation (PADS'00)*, Bologna, Italy, May 28-31, 2000, pp. 71-78.
- 37. **Towards realistic million-node Internet simulations.** James Cowie, Hongbo Liu, Jason Liu, David Nicol, and Andy Ogielski. *Proceedings of the 1999 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'99)*, Las Vegas, NV, USA, June 28-July 1, 1999, 9 pages.
- 38. **Performance prediction of a parallel simulator.** Jason Liu, David M. Nicol, Brian J. Premore, and Anna L. Poplawski. *Proceedings of the 13th Workshop on Parallel and Distributed Simulation (PADS'99)*, Atlanta, GA, USA, May 1-4, 1999, pp. 156-164.
- 39. The dark side of risk (what your mother never told you about Time Warp). David M. Nicol and Xiaowen Liu. *Proceedings of the 11th Workshop on Parallel*

- and Distributed Simulation (PADS'97), Lockenhaus, Austria, May 10-13, 1997, pp. 188-195.
- 40. Parallelizable execution-driven simulation of threaded distributed memory parallel computations. David M. Nicol and Jason X. Liu. *Proceedings of the 4th International Workshop on Modeling, Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS'96)*, San Jose, CA, USA, February 1-4, 1996, pp. 174-178.

## **BOOK CHAPTERS**

- 1. **Parallel discrete-event simulation.** Jason Liu. *Wiley Encyclopedia of Operations Research and Management Science*. Edited by James J. Cochran. John Wiley & Sons, ISBN: 978-0-470-40063-0. DOI: 10.1002/9780470400531, March 2011, 21 pages.
- 2. **Parallel and distributed immersive real-time simulation of large-scale networks.** Jason Liu. *Parallel and Distributed Computing*. Edited by Alberto Ros Bardisa. ISBN: 978-953-307-057-5, pp. 221-245.

## **THESIS**

1. **Improvements in conservative parallel simulation of large-scale models.** Xiaowen (Jason) Liu. *Ph.D. Thesis.* Dartmouth College. February 2003. Advisor: David M. Nicol.

## **TECHNICAL REPORTS**

- 1. **Model-driven network emulation with virtual time machine.** Jason Liu, and Raju Rangaswami. *Technical Report TR-2009-03-01*, School of Computing and Information Sciences, Florida International University, March 2009.
- 2. **Outdoor experimental comparison of four ad hoc routing algorithms.** Robert S. Gray, David Kotz, Calvin Newport, Nikita Dubrovsky, Aaron Fiske, Jason Liu, Christopher Masone, Susan McGrath, and Yougu Yuan. *Technical Report TR2004-511*, Dept. of Computer Science, Dartmouth College, June 2004.
- 3. Experimental evaluation of wireless simulation assumptions. David Kotz, Calvin Newport, Robert S. Gray, Jason Liu, Yougu Yuan, and Chip Elliott. *Technical Report TR2004-507*, Dept. of Computer Science, Dartmouth College, June 2004.
- 4. Lock-free scheduling of logical processes in parallel simulation. Xiaowen Liu, David M. Nicol, and King Tan. *Technical Report TR2001-385*, Dept. of Computer Science, Dartmouth College, January 2001.
- 5. **Automatic video pause detection filter.** Xiaowen Liu, Charles B. Owen, and Fillia Makedon. *Technical Report PCS-TR97-307*, Dept. of Computer Science, Dartmouth College, February 1997.
- 6. A critique of the Telecommunications Description Language (TeD). Brian J. Premore, David M. Nicol, and Xiaowen Liu. *Technical Report PCS-TR96-299*, Dept. of Computer Science, Dartmouth College, November 1996.
- 7. The dark side of risk (what your mother never told you about Time Warp). David M. Nicol and Xiaowen Liu. *Technical Report PCS-TR96-298*, Dept. of Computer Science, Dartmouth College, November 1996.

#### **FUNDED RESEARCH**

- 1. **SoftPM: Streamlining High-End Computing with Software Persistent Memory.** National Science Foundation, CCF-0937964. PI: Raju Rangaswami. Co-PIs: Jason Liu, Ming Zhao. \$712K, 2010-2013.
- 2. PrimoGENI--Developing GENI Aggregates for Real-time Large-scale Network Simulation. National Science Foundation (through GENI Project Office). PI: Jason Liu. Co-PIs: Julio Ibarra, Heidi Alvarez. \$502K, 2009-2013.
- 3. **CAREER: Immersive Large-Scale Network Simulations.** National Science Foundation, CNS-0546712, CNS-0836408. PI: Jason Liu. \$436K, 2006-2012.
- 4. CREST: Center for Innovative Information Systems Engineering, Subproject 5: Complex System Modeling, Analysis and Realization (CS-MAR). National Science Foundation, HRD-0833093. PI: Xudong He; Co-PIs: Shu-Ching Chen, Peter Clarke, Jason Liu, S. Masoud Sadjadi. \$825K, 2008-2013.

#### **INVITED TALKS**

- 1. Introduction to parallel simulation of large-scale networks. *Huawei Co.*, April 2012.
- 2. Can we really model the Internet? Florida International University, School of Computing and Information Sciences, October 2011.
- **3.** Parallel simulation and high-performance network modeling, *Beijing University of Technology*, June 2011.
- 4. **Parallel simulation and high-performance network modeling**, *Tsinghua University*, June 2011.
- 5. **Parallel simulation and high-performance network modeling**, *Beihang University*, June 2011.
- 6. **Parallel simulation and high-performance network modeling**, *National University of Defense Technology*, July 2011.
- 7. Parallel simulation toward extreme-scale network experimentation. Los Alamos National Laboratory, May 2010.
- 8. Parallel simulation toward extreme-scale network experimentation. Sandia National Laboratories, May 2010.
- 9. Model-driven emulation of large-scale networks. *University of Bonn*, June 2009.
- 10. **Somewhere between network simulation and emulation**. *Florida International University*, Telecommunications and Information Technology Institute (IT2), February 2008.
- 11. **The PRIME project & hybrid traffic modeling**. *Florida International University*, School of Computing and Information Sciences, October 2007.
- 12. Immersive real-time network simulation. Sandia National Laboratories, July 2007.
- 13. **The PRIME research: virtually all for real.** *Florida International University*, School of Computing and Information Sciences, April 2007.
- 14. **PRIME time research: virtually all for real.** Colorado School of Mines, Department of Mathematical and Computer Sciences, January 2007.
- 15. Parallel real-time immersive network modeling environment (PRIME). *University of Colorado at Boulder*, Department of Computer Science, September 2006.

- 16. Parallel real-time immersive network modeling environment (PRIME). Los Alamos National Laboratory, August 2006.
- 17. **Toward parallel real-time simulation of global-scale networks.** *University of Colorado at Denver*, Department of Computer Science and Engineering, February 2005.
- 18. The "real" life of network simulations: research in real-time network simulations and validations. Colorado School of Mines, Department of Mathematical and Computer Sciences, January 2005.
- 19. Riding the curve: scalable parallel simulation for networking research. *Colorado School of Mines*, Department of Mathematical and Computer Sciences, March 2004.
- 20. Riding the curve: scalable parallel simulation for networking research. Virginia Polytechnic Institute and State University (Virginia Tech), Department of Computer Science, March 2004.
- 21. Parallel simulation using DaSSF. Cray Inc., April 2002.
- 22. **DaSSF** and simulation of large-scale wireless ad-hoc networks. *BBN Technologies*, February 2002.
- 23. Enabling large-scale discrete-event simulation with DaSSF. Los Alamos National Laboratory, January 2002.

#### HONORS AND AWARDS

- CNS Best Paper Award, 2012.
- NSF CAREER Award, 2006.
- FIU 2010 Top Scholars in Research, 2010.
- FIU SCIS Excellence in Service Award, 2009.
- GEC Travel Grant (several times).
- Beijing Outstanding Student Award in Physics and Engineering, 1992.
- University Academic Excellence Award, 1990–1993.
- University Scholarship, 1988–1989.

## PROFESSIONAL SERVICES

- **Associate Editor,** Simulation: Transactions of the Society for Modeling and Simulation International, 2009-2012.
- **Guest Editor,** Simulation: Transactions of the Society for Modeling and Simulation International, Special Issue on Advanced and Distributed Simulation, 2009.
- Steering Committee Member, ACM SIGSIM Conference on Principles of Advanced Discrete Simulation (PADS), 2013.
- Steering Committee Member, ACM/IEEE/SCS Workshop on Principles of Advanced and Distributed Simulation (PADS), 2008-2012.
- **General Co-Chair**, 26th ACM/IEEE/SCS Workshop on Principles of Advanced and Distributed Simulation (**PADS 2012**), Zhangjiajie, China, July 15-19, 2012.
- **General Chair**, 4th International ICST Conference on Simulation Tools and Techniques (**SIMUTools 2011**), Barcelona, Spain, March 21-25, 2011.

- **General Chair,** 18th Annual Meeting of the IEEE/ACM International Symposium on Modeling, Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS 2010), Miami Beach, Florida, August 17-19, 2010.
- **Program Co-Chair**, 3rd International ICST Conference on Simulation Tools and Techniques (**SIMUTools 2010**), Torremolinos, Malaga, Spain, March 15-19, 2010.
- Local Coordinator, 4th GENI Engineering Conference (GEC4), Miami, Florida, March 31-April 2, 2009.
- **Program Chair**, 22nd Workshop on Principles of Advanced and Distributed Simulation (**PADS 2008**), Rome, Italy, June 3-6, 2008.
- **Proceedings Co-Editor**, 2006 Winter Simulation Conference (**WSC**), Monterey, California, December 2-5, 2006.
- **Publicity Chair**, 19th Workshop on Principles of Advanced and Distributed Simulation (**PADS 2005**), Monterey, California, June 1-3, 2005.
- NSF Panelist: 2008, 2009
- Program Committee Membership:
  - Annual IEEE/IFIP International Conference on Dependable Systems and Networks (DSN), 2013.
  - ACM SIGSIM Conference on Principles of Advanced Discrete Simulation (PADS), 2013.
  - o ACM/IEEE/SCS Workshop on Principles of Advanced and Distributed Simulation (**PADS**), 2005-2012.
  - Annual Meeting of the IEEE/ACM International Symposium on Modeling, Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS), 2009-2012.
  - o IEEE Conference on Local Computer Networks (LCN), 2008-2012.
  - o IEEE/ACM International Symposium on Distributed Simulation and Real-time Applications (**DS-RT**), 2008-2012.
  - o International Conference on Testbeds and Research Infrastructures for the Development of Networks and Communities (**TridentCom**), 2009-2010.
  - o ICST International Conference on Simulation Tools and Techniques (**SIMUTools**), 2009-2012.
  - Others (many lost count): WSC 2012; HPCC 2011, 2012; ICC 2012; SN 2008-2011; DCPerf 2011; ChinaCom 2009, 2010; WCNC 2010, 2011; ICISTM 2009; ICNSC 2008, 2009; ICCCN 2008-2011; IWCMC 2007
- Other Professional Activities
  - o Member of ACM, 2003-current.
  - o Member of IEEE Computer Society, 2003-current.
  - o Member of IEEE Communication Society, 2006-2009.