

Biographical Summary

Dr. Jason Liu is currently an Associate Professor at the School of Computing and Information Sciences (SCIS), College of Engineering and Computing, Florida International University (FIU). He received his B.A. degree in Computer Science from Beijing University of Technology in China in 1993, an M.S. degree in Computer Science from College of William and Mary in 2000, and a Ph.D. degree in Computer Science from Dartmouth College in 2003. He joined FIU in 2007 as a tenure-track assistant professor. He was promoted to Associate Professor and received tenure in 2011. Before joining FIU in 2007, he was a postdoctoral student at the University of Illinois, Urbana-Champaign during 2003-2004, and subsequently a tenure-track assistant professor at Colorado School of Mines during 2004-2007.

Dr. Liu's research interests include parallel and distributed simulation, high-performance modeling and simulation of computer networks and computer systems, and high-performance computing. He has published 2 book chapters, 16 journal articles, and 71 conference papers in premiere journals and conferences of his research areas, including ACM Transactions on Modeling and Computer Simulation (TOMACS), IEEE Transactions on Computers, IEEE Transactions on Parallel and Distributed System (TPDS), SIGSIM-PADS, MASCOTS, WSC, etc. Google Scholar shows that Dr. Liu's publications have received a total of 2,821 citations, and have an h-index of 27 and an i10-index of 48 (from statistics gathered in August 2018).

Dr. Jason Liu is an NSF CAREER awardee in 2006, and an ACM Distinguished Scientist in 2014. His research has been supported by various funding agencies, including NSF, DOE, DOD, and DHS. Overall, Dr. Liu has received over \$5.8M of grants, either as a PI, Co-PI, or senior investigator. Among these grants, a total of \$3.6M has been received being PI.

Dr. Liu currently serves on the Editorial Board of ACM Transactions on Modeling and Computer Simulation (TOMACS), Transactions of the Society for Modeling and Simulation International (SIMULATION), and IEEE Networking Letters. He is also on the Steering Committee of the ACM SIGSIM Conference on Principles of Advanced Discrete Simulation (SIGSIM-PADS). He has served as General Chair or Program Chair for several conferences in his research fields.

TENURE AND PROMOTION CURRICULUM VITAE
OF
JASON XIAOWEN LIU
School of Computing and Information Sciences
College of Engineering and Computing

EDUCATION

Ph.D.	Dartmouth College, USA	Computer Science	2003.2
M.S.	College of William and Mary, USA	Computer Science	2000.11
B.A.	Beijing University of Technology, China	Computer Science	1993.7

FULL-TIME ACADEMIC EXPERIENCE

Florida International University (FIU), Florida, USA			
	<i>Associate Professor</i>	Computer Science	2011.8 – current
	<i>Assistant Professor</i>	Computer Science	2007.8 – 2011.7
Colorado School of Mines (CSM), Colorado, USA			
	<i>Assistant Professor</i>	Computer Science	2004.8 – 2007.7
University of Illinois, Urbana-Champaign (UIUC), Illinois, USA			
	<i>Postdoctoral Research Associate</i>	Computer Science	2003.9 – 2004.8

PART-TIME ACADEMIC EXPERIENCE

Tsinghua University, Beijing, China			
	<i>Honorary Visiting Professor</i>	Computer Science	2017.5 – current
Université Pierre et Marie Curie (UPMC), Paris, France			
	<i>Visiting Professor</i>	Computer Science	2017.3 – 2017.7
Dartmouth College, New Hampshire, USA			
	<i>Graduate Research/Teaching Assistant</i>	Computer Science	1996.9 – 2003.2
College of William and Mary, Virginia, USA			
	<i>Graduate Research Assistant</i>	Computer Science	1995.1 – 1996.8

NON-ACADEMIC EXPERIENCE

Los Alamos National Laboratory, New Mexico, USA			
	<i>Visiting Scientist</i>		2016.9 – 2017.1
Institute for Security Technology Studies, New Hampshire, USA			
	<i>Research Scientist</i>		2003.2 – 2003.8
Icon Technologies, Beijing, China			
	<i>Co-founder & Chief Engineer</i>		1993.8 – 1994.12
Institute of Mathematics, China Academy of Science, Beijing, China			
	<i>Research Intern</i>		1993.1 – 1993.6

EMPLOYMENT RECORD AT FIU

Associate Professor 2011.8 – current
Assistant Professor 2007.8 – 2011.7

PUBLICATIONS IN DISCIPLINE

Summary

In total, Dr. Liu has published 16 journal articles (7 after promotion to Associate Professor in 2011), 71 conference papers (36 after promotion), and 2 book chapters. Note that, in Computer Science, publications in conferences and workshops typically result in a broader and more immediate impact than journal publications (as evident by the higher citation count received by conference papers in the list). A total of 29 papers co-authored by Dr. Liu have received more than 20 citations, among which 14 papers received more than 50 citations, 2 papers received more than 150 citations, and 1 paper received more than 600 citations. A total of 9 papers have been nominated for best paper awards, among which 2 papers received the best paper awards.

In the list to follow, the names of student/postdoc co-authors are underlined. Impact factors for journals and acceptance rates for conferences and workshops are provided if such information is available. Citation count is obtained from Google Scholar (in February 2018). Publications that were not peer reviewed are indicated by “NPR” (2 of them).

Books

N/A

Articles

1. Xiaobin Ma, Zhihui Du, and Jason Liu. Program Power Profiling Based on Phase Behaviors, *Sustainable Computing, Informatics and Systems*, 13 pages, to appear.
[DOI:10.1016/j.suscom.2018.05.001](https://doi.org/10.1016/j.suscom.2018.05.001) (impact factor: unknown, citations: 0)
2. Xiu Li, Chang Men, Zhihui Du, Jason Liu, Manli Li, and Xiaolei Zhang. Investigating the Statistical Distribution of Learning Coverage in MOOCs, *Information*, Volume 8, Issue 4, Article 150, 12 pages, November 2017.
[DOI:10.3390/info8040150](https://doi.org/10.3390/info8040150) (impact factor: unknown, citations: 0)
3. Miguel Erazo, Rong Rong, and **Jason Liu**. Symbiotic Network Simulation and Emulation, *ACM Transactions on Modeling and Computer Simulation (TOMACS)*, Volume 26, Issue 1, Article 2, 25 pages, June 2015.
[DOI:10.1145/2717308](https://doi.org/10.1145/2717308) (impact factor: 1.0, citations: 6)
4. Ting Li and **Jason Liu**. Cluster-based Spatio-temporal Background Traffic Generation for Network Simulation, *ACM Transactions on Modeling and Computer Simulation (TOMACS)*,

Volume 25, Issue 1, Article 4, 25 pages, November 2014.

[DOI:10.1145/2667222](https://doi.org/10.1145/2667222) (impact factor: 1.0, citations: 8)

5. **Ting Li**, **Nathanael Van Vorst**, and **Jason Liu**. A Rate-based TCP Traffic Model to Accelerate Network Simulation, *Simulation: Transactions of the Society for Modeling and Simulation International*, 89(4), pages 466-480, February 2013.
[DOI:10.1177/0037549712469892](https://doi.org/10.1177/0037549712469892) (impact factor: 0.713, citations: 6)
6. **Hao Jin**, Deng Pan, **Jason Liu**, and Niki Pissinou. OpenFlow-based Flow-Level Bandwidth Provisioning for CICQ Switches, *IEEE Transactions on Computers*, 62(9), pages 1799-1812, July 2012.
[DOI:10.1109/TC.2012.167](https://doi.org/10.1109/TC.2012.167) (impact factor: 2.916, citations: 17)
7. **Nathanael Van Vorst**, **Miguel Erazo**, and **Jason Liu**. PrimoGENI for Hybrid Network Simulation and Emulation Experiments in GENI, *Journal of Simulation*, Volume 6, Issue 3, pages 179-192, 2012.
[DOI:10.1057/jos.2012.5](https://doi.org/10.1057/jos.2012.5) (impact factor: 0.772, citations: 5)

After Promotion to Associate Professor at FIU ↑

8. **Miguel A. Erazo**, and **Jason Liu**. A Model-Driven Emulation Approach to Large-Scale TCP Performance Evaluation, *International Journal of Communication Networks and Distributed Systems (IJCNDS)*, Volume 5, No. 1/2, pages 130-150, 2010.
[DOI:10.1504/IJCNDS.2010.033971](https://doi.org/10.1504/IJCNDS.2010.033971) (impact factor: unknown, citations: 4)
9. **Yue Li**, **Jason Liu**, and Raju Rangaswami. Real-Time Network Simulation Support for Scalable Routing Experiments, *International Journal of Simulation and Process Modelling (IJSPM), Special Issue on Parallel and Distributed Simulation*, Volume 5, No. 2, pages 146-156, 2009.
[DOI:10.1504/IJSPM.2009.028627](https://doi.org/10.1504/IJSPM.2009.028627) (impact factor: unknown, citations: 5)
10. **Jason Liu** and **Yue Li**. Parallel Hybrid Network Traffic Models, *Simulation: Transactions of the Society for Modeling and Simulation International*, Volume 85, No. 4, pages 271-286, 2009.
[DOI:10.1177/0037549708099996](https://doi.org/10.1177/0037549708099996) (impact factor: 0.713, citations: 6)
11. **Jason Liu**, **Yue Li**, **Nathanael Van Vorst**, **Scott Mann**, and **Keith Hellman**. A Real-Time Network Simulation Infrastructure based on OpenVPN, *Journal of Systems and Software*, Volume 82, Issue 3, pages 473-485, March 2009.
[DOI:10.1016/J.JSS.2008.08.015](https://doi.org/10.1016/J.JSS.2008.08.015) (impact factor: 2.444, citations: 25)
12. **Jason Liu** and **Yue Li**. On the Performance of a Hybrid Network Traffic Model, *Simulation Modelling Practice and Theory*, Volume 16, Issue 6, pages 656-669, July 2008.
[DOI:10.1016/J.SIMPAT.2008.04.007](https://doi.org/10.1016/J.SIMPAT.2008.04.007) (impact factor: 1.954, citations: 13)
13. Calvin Newport, David Kotz, Yougu Yuan, Robert S. Gray, **Jason Liu**, and Chip Elliott. Experimental Evaluation of Wireless Simulation Assumptions, *Simulation: Transactions of the Society for Modeling and Simulation International*, Volume 83, Issue 9, pages 643-661, September 2007.
[DOI:10.1177/0037549707085632](https://doi.org/10.1177/0037549707085632) (impact factor: 0.713, citations: 93)

After Joining FIU ↑

14. Michael Liljenstam, **Jason Liu**, David Nicol, Yougu Yuan, Guanhua Yan, and Chris Grier. RINSE: the Real-Time Immersive Network Simulation Environment for Network Security Exercises (Extended Version), *Simulation: Transactions of the Society for Modeling and Simulation International*, Volume 82, Issue 1, pages 43-59, January 2006.
[DOI:10.1177/0037549706065544](https://doi.org/10.1177/0037549706065544) (impact factor: 0.713, citations: 31)
15. **Jason Liu**, Yougu Yuan, David M. Nicol, Robert S. Gray, Calvin C. Newport, David Kotz, and Luiz Felipe Perrone. Empirical Validation of Wireless Models in Simulations of Ad hoc Routing Protocols, *Simulation: Transactions of the Society for Modeling and Simulation International*, Volume 81, Issue 4, pages 307-323, April 2005.
[DOI:10.1177/0037549705055017](https://doi.org/10.1177/0037549705055017) (impact factor: 0.713, citations: 45)
16. David M. Nicol and **Jason Liu**. Composite Synchronization in Parallel Discrete-Event Simulation, *IEEE Transactions on Parallel and Distributed Systems*, Volume 13, Issue 5, pages 433-446, May 2002.
[DOI:10.1109/TPDS.2002.1003854](https://doi.org/10.1109/TPDS.2002.1003854) (impact factor: 4.181, citations: 79)

Proceedings

1. Christopher Hannon, Nandakishore Santhi, Stephan Eidenbenz, **Jason Liu**, and Dong Jin. Just-In-Time Parallel Simulation, in *Proceedings of the 2018 Winter Simulation Conference (WSC 2018)*, 12 pages, December 2018, to appear.
2. Gopinath Chennupathi, Stephan Eidenbenz, Alex Long, Olena Tkachenko, Joseph Zerr, and **Jason Liu**. IMCSim: Parameterized Performance Prediction for Implicit Monte Carlo Codes, in *Proceedings of the 2018 Winter Simulation Conference (WSC 2018)*, 12 pages, December 2018, to appear.
3. Jingjing He, Chang Men, Senbiao Fang, Zhihui Du, **Jason Liu**, and Manli Li. Analysis of MOOC Learning Rhythms, in *Proceedings of the 4th IEEE International Conference on Data Science and Systems (DSS-2018)*, 8 pages, June 2018, to appear.
4. Kishwar Ahmed, **Jason Liu**, and Kazutomo Yoshii. Enabling Demand Response for HPC Systems Through Power Capping and Node Scaling, in *Proceedings of the 20th IEEE International Conference on High Performance Computing and Communications (HPCC-2018)*, 8 pages, June 2018, to appear.
5. Giuseppe Vietri, Liana V. Rodriguez, Wendy A. Martinez, Steven Lyons, **Jason Liu**, Raju Rangaswami, Giri Narasimhan, and Ming Zhao. Driving Cache Replacement with ML-based LeCaR, in *Proceedings of the 10th USENIX Workshop on Hot Topics in Storage and File Systems (HotStorage'18)*, 6 pages, July 2018, to appear.
6. Pinchao Liu, Liting Hu, Hailu Xu, Zhiyuan Shi, **Jason Liu**, Qingyang Wang, Jai Dayal, and Yuzhe Tang. A Toolset for Detecting Containerized Application's Dependencies in CaaS Clouds, in *Proceedings of the 2018 IEEE International Conference on Cloud Computing (IEEE CLOUD 2018)*, 9 pages, July 2018, to appear.
7. Mohammad Abu Obaida, **Jason Liu**, Gopinath Chennupati, Nandakishore Santhi, and Stephan Eidenbenz. Parallel Application Performance Prediction using Analysis Based Models and HPC Simulations, in *Proceedings of the 2018 ACM SIGSIM Conference on Principles of Advanced Discrete Simulation (SIGSIM-PADS 2018)*, pages 49-59, May 2018.
[DOI:10.1145/3200921.3200937](https://doi.org/10.1145/3200921.3200937) (acceptance rate: 33%, citations: 0)
8. Mohammad Abu Obaida and **Jason Liu**. Simulation of HPC Job Scheduling and Large-Scale Parallel Workloads, in *Proceedings of the 2017 Winter Simulation Conference (WSC 2017)*,

pages 920-931, December 2017.

[DOI:10.1109/WSC.2017.8247843](https://doi.org/10.1109/WSC.2017.8247843) (acceptance rate: *unknown*, citations: 0)

9. Kishwar Ahmed, **Jason Liu**, Abdel-Hameed Badawy, and Stephan Eidenbenz. A Brief History of HPC Simulation and Future Challenges, in *Proceedings of the 2017 Winter Simulation Conference (WSC 2017)*, pages 419-430, December 2017.

[DOI:10.1109/WSC.2017.8247804](https://doi.org/10.1109/WSC.2017.8247804) (acceptance rate: *unknown*, citations: 0)

10. Mohammad Abu Obaida and **Jason Liu**. On Improving Parallel Real-Time Network Simulation for Hybrid Experimentation of Software Defined Networks, in *Proceedings of the 10th EAI International Conference on Simulation Tools and Techniques (SIMUTOOLS 2017)*, 9 pages, September 2017.

(acceptance rate: *unknown*, citations: 0)

11. Kishwar Ahmed, **Jason Liu**, and Xingfu Wu. An Energy Efficient Demand-Response Model for High Performance Computing Systems, in *Proceedings of the 25th IEEE International Symposium on the Modeling, Analysis, and Simulation of Computer and Telecommunication Systems (MASCOTS 2017)*, pages 176-186, September 2017.

[DOI:10.1109/MASCOTS.2017.25](https://doi.org/10.1109/MASCOTS.2017.25) (acceptance rate: 31%, citations: 0)

12. Tianzhi Feng, Zhihui Du, Yankui Sun, Jianyan Wei, Jing Bi, and **Jason Liu**. Real-Time Anomaly Detection of Short Time-Scale GWAC Survey Light Curves, in *Proceedings of the 6th IEEE International Congress on Big Data*, pages 224-231, June 2017.

[DOI:10.1109/BigDataCongress.2017.38](https://doi.org/10.1109/BigDataCongress.2017.38) (acceptance rate: *unknown*, citations: 0)

13. Rong Rong and Jason Liu. Distributed Mininet with Symbiosis, in *Proceedings of the IEEE International Conference on Communications (ICC 2017)*, 6 pages, May 2017.

[DOI:10.1109/ICC.2017.7996343](https://doi.org/10.1109/ICC.2017.7996343) (acceptance rate: 38%, citations: 0)

14. Xinning Hui, Zhihui Du, **Jason Liu**, Hongyang Sun, Yuxiong He, David A. Bader. When Good Enough is Better: Energy-Aware Scheduling for Multicore Servers, in *Proceedings of the 13th Workshop on High-Performance, Power-Aware Computing (HPPAC 2017)*, held in conjunction with 31st IEEE International Parallel and Distributed Processing Symposium (IPDPS 2017), pages 984-993, May 2017.

[DOI: 10.1109/IPDPSW.2017.38](https://doi.org/10.1109/IPDPSW.2017.38) (acceptance rate: *unknown*, citations: 0)

15. Chang Men, Xiu Li, Zhihui Du, **Jason Liu**, Manli Li, and Xiaolei Zhang. Zipf's Law in MOOC Learning Behavior, in *Proceedings of the 2nd IEEE International Conference on Big Data Analysis (ICBDA 2017)*, pages 640-644, March 2017.

[DOI:10.1109/ICBDA.2017.8078713](https://doi.org/10.1109/ICBDA.2017.8078713) (acceptance rate: *unknown*, citations: 1)

16. Kishwar Ahmed, **Jason Liu**, Stephan Eidenbenz, and Joe Zerr. Scalable Interconnection Network Models for Rapid Performance Prediction of HPC Applications, in *Proceedings of the 18th International Conference on High Performance Computing and Communications (HPCC 2016)*, pages 1069-1078, December 2016.

[DOI: 10.1109/HPCC-SmartCity-DSS.2016.0151](https://doi.org/10.1109/HPCC-SmartCity-DSS.2016.0151) (acceptance rate: *unknown*, citations: 4)

17. Adelinde M. Uhrmacher, Sally Brailsford, **Jason Liu**, Markus Rabe, and Andreas Tolk. Panel – Reproducible Research in Discrete-Event Simulation – A Must or a Rather Maybe? In *Proceedings of the 2016 Winter Simulation Conference (WSC 2016)*, pages 1301-1315, December 2016.

[DOI:10.1109/WSC.2016.7822185](https://doi.org/10.1109/WSC.2016.7822185) (acceptance rate: 69%, citations: 5)

18. Xiaobin Ma, Zhihui Du and **Jason Liu**. Fast and Effective Power Profiling of Program Execution based on Phase Behaviors, in *Proceedings of the 1st International Workshop on Resilience and/or Energy-Aware Techniques for High-Performance Computing (RE-HPC*

2016), held in conjunction with the *7th International Green and Sustainable Computing Conference (IGSC 2016)*, 8 pages, November 2016.

[DOI: 10.1109/IGCC.2016.7892625](https://doi.org/10.1109/IGCC.2016.7892625) (acceptance rate: *unknown*, citations: 0)

19. **Jason Liu** and Stephan Eidenbenz. Toward Integrated Multi-resolution HPC Modeling for Rapid Performance Prediction (An Abstract). *2016 Workshop on Modeling and Simulation of Systems and Applications (ModSim 2016)*, 1 page, August 2016.
(NPR, citations: 0)
20. Kishwar Ahmed, Mohammad Obaida, **Jason Liu**, Stephan Eidenbenz, Nandakishore Santhi, and Guillaume Chapuis. An Integrated Interconnection Network Model for Large-Scale Performance Prediction, in *Proceedings of the 2016 ACM SIGSIM Conference on Principles of Advanced Discrete Simulation (SIGSIM-PADS 2016)*, pages 177-187, May 2016.
[DOI:10.1145/2901378.2901396](https://doi.org/10.1145/2901378.2901396) (acceptance rate: *unknown*, citations: 7)
21. Nandakishore Santhi, Stephan Eidenbenz, and **Jason Liu**. The Simian Concept: Parallel Discrete Event Simulation with Interpreted Languages and Just-in-Time Compilation, in *Proceedings of the 2015 Winter Simulation Conference (WSC 2015)*, pages 3013-3024, December 2015.
[DOI:10.1109/WSC.2015.7408405](https://doi.org/10.1109/WSC.2015.7408405) (acceptance rate: 68%, citations: 10)
22. **Jason Liu** and Cesar Marcondes. Scalable Emulation of SDN Applications with Simulation Symbiosis, in *Proceedings of the 2nd SwitchOn Workshop*, 2 pages, October 2015.
(NPR, citations: 0)
23. **Jason Liu**, Cesar Marcondes, Musa Ahmed, and Rong Rong. Toward Scalable Emulation of Future Internet Applications with Simulation Symbiosis, in *Proceedings of the 19th IEEE/ACM International Symposium on Distributed Simulation and Real Time Applications (DS-RT 2015)*, pages 68-77, October 2015.
[DOI:10.1109/DS-RT.2015.19](https://doi.org/10.1109/DS-RT.2015.19) (acceptance rate: *unknown*, citations: 4, **best paper candidate**)
24. Ricardo Santana, Steven Lyons, Ricardo Koller, Raju Rangaswami, and **Jason Liu**. To ARC or Not to ARC, in *Proceedings of the 7th USENIX Workshop on Hot Topics in Storage and File Systems (HotStorage 2015)*, 5 pages, July 2015.
(acceptance rate: 30%, citations: 8)
25. Eric Jo, Linda Butler, Deng Pan, and **Jason Liu**. A Simulation and Emulation Study of SDN-based Multipath Routing for Fat-Tree Data Center Networks, in *Proceedings of the 2014 Winter Simulation Conference (WSC 2014)*, pages 3072-3083, December 2014.
[DOI:10.1109/WSC.2014.7020145](https://doi.org/10.1109/WSC.2014.7020145) (acceptance rate: 64%, citations: 12)
26. Rong Rong, Jiang Hao, and **Jason Liu**. Performance Study of a Minimalistic Simulator on XSEDE Massively Parallel Systems, in *Proceedings of the 3rd Annual conference of the Extreme Science and Engineering Discovery Environment (XSEDE 2014)*, Article No. 15, 8 pages, July 2014.
[DOI:10.1145/2616498.2616512](https://doi.org/10.1145/2616498.2616512) (acceptance rate: *unknown*, citations: 4)
27. **Jason Liu**, Yuan Liu, Zhihui Du, and Ting Li. GPU-Assisted Hybrid Network Traffic Model, in *Proceedings of the 2014 ACM SIGSIM Conference on Principles of Advanced Discrete Simulation (SIGSIM-PADS 2014)*, pages 63-74, May 2014.
[DOI:10.1145/2601381.2601382](https://doi.org/10.1145/2601381.2601382) (acceptance rate: 58%, citations: 7, **best paper award**)
28. **Jason Liu**, Mohammad Abu Obaida, and Fernando Dos Santos. Toward PrimoGENI Constellation for Distributed At-scale Hybrid Network Test, in *Proceedings of the 3rd GENI Research and Educational Experiment Workshop (GREE 2014)*, pages 29-35, March 2014.
[DOI:10.1109/GREE.2014.10](https://doi.org/10.1109/GREE.2014.10) (acceptance rate: *unknown*, citations: 0)

29. **Jason Liu**. Real-Time Scheduling of Logical Processes for Parallel Discrete-Event Simulation, in *Proceedings of the 2013 Winter Simulation Conference (WSC 2013)*, pages 2959-2971, December 2013.
[DOI:10.1109/WSC.2013.6721664](https://doi.org/10.1109/WSC.2013.6721664) (acceptance rate: 69%, citations: 6)
30. Miguel A. Erazo and **Jason Liu**. Leveraging Symbiotic Relationship between Simulation and Emulation for Scalable Network Experimentation, in *Proceedings of the 2013 ACM SIGSIM Conference on Principles of Advanced Discrete Simulation (SIGSIM-PADS 2013)*, pages 79-90, May 2013.
[DOI:10.1145/2486092.2486103](https://doi.org/10.1145/2486092.2486103) (acceptance rate: 39%, citations: 0, **best paper candidate**)
31. Hao Jin, Tosmate Cheochnngarn, Dmita Levy, Alex Smith, Deng Pan, **Jason Liu**, and Niki Pissinou. Joint Host-Network Optimization for Energy-Efficient Data Center Networking, in *Proceedings of the 2013 IEEE 27th International Symposium on Parallel & Distributed Processing (IPDPS 2013)*, pages 623-634, May 2013.
[DOI:10.1109/IPDPS.2013.100](https://doi.org/10.1109/IPDPS.2013.100) (acceptance rate: 22%, citations: 54)
32. Tosmate Cheochnngarn, Hao Jin, Jean Andrian, Deng Pan, and **Jason Liu**. Depth-First Worst-Fit Search Based Multipath Routing for Data Center Networks, in *Proceedings of the 2012 IEEE Global Communications Conference (GLOBECOM 2012)*, pages 2821-2826, December 2012.
[DOI:10.1109/GLOCOM.2012.6503544](https://doi.org/10.1109/GLOCOM.2012.6503544) (acceptance rate: 38%, citations: 10)
33. **Jason Liu** and Rong Rong. Hierarchical Composite Synchronization, in *Proceedings of the 26th Workshop on Principles of Advanced and Distributed Simulation (PADS 2012)*, pages 3-12, July 2012.
[DOI:10.1109/PADS.2012.20](https://doi.org/10.1109/PADS.2012.20) (acceptance rate: *unknown*, citations: 19)
34. Nathanael Van Vorst and **Jason Liu**. Realizing Large-Scale Interactive Network Simulation via Model Splitting, in *Proceedings of the 26th Workshop on Principles of Advanced and Distributed Simulation (PADS 2012)*, pages 120-129, July 2012.
[DOI:10.1109/PADS.2012.35](https://doi.org/10.1109/PADS.2012.35) (acceptance rate: *unknown*, citations: 3)
35. Miguel Erazo, Ting Li, **Jason Liu** and Stephan Eidenbenz. Toward Comprehensive and Accurate Simulation Performance Prediction of Parallel File Systems, in *Proceedings of the 42nd Annual IEEE/IFIP International Conference on Dependable Systems and Networks (DSN 2012)*, 12 pages, June 2012.
[DOI:10.1109/DSN.2012.6263930](https://doi.org/10.1109/DSN.2012.6263930) (acceptance rate: 17%, citations: 4)
36. Ting Li, Nathanael Van Vorst, Rong Rong, and **Jason Liu**. Simulation Studies of OpenFlow-Based In-Network Caching Strategies, in *Proceedings of the 15th Communications and Networking Simulation Symposium (CNS 2012)*, 7 pages, March 2012.
(acceptance rate: *unknown*, citations: 9, **best paper award**)

After Promotion to Associate Professor at FIU ↑

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37. Nathanael Van Vorst, Ting Li, and **Jason Liu**. How Low Can You Go? Spherical Routing for Scalable Network Simulations, in *Proceedings of the 19th Annual Meeting of the IEEE International Symposium on Modeling, Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS 2011)*, pages 259-268, July 2011.
[DOI:10.1109/MASCOTS.2011.35](https://doi.org/10.1109/MASCOTS.2011.35) (acceptance rate: 35%, citations: 3)
 38. Nathanael Van Vorst, Miguel Erazo, and **Jason Liu**. PrimoGENI: Integrating Real-Time Network Simulation and Emulation in GENI, in *Proceedings of the 25th Workshop on*

- Principles of Advanced and Distributed Simulation (PADS 2011)*, 9 pages, June 2011.
[DOI:10.1109/PADS.2011.5936747](https://doi.org/10.1109/PADS.2011.5936747) (acceptance rate: *unknown*, citations: 23)
39. **Hao Jin**, Deng Pan, **Jason Liu**, and Niki Pissinou. OpenFlow Based Flow Level Bandwidth Provisioning for CICQ Switches, in *Proceedings of 2011 IEEE International Conference on Computer Communications (INFOCOM 2011) Mini-Conference*, pages 476-480, April 2011.
[DOI:10.1109/INFCOM.2011.5935208](https://doi.org/10.1109/INFCOM.2011.5935208) (acceptance rate: 16%, citations: 8)
 40. **Jason Liu**, Raju Rangaswami, and Ming Zhao. Model-Driven Network Emulation with Virtual Time Machine, in *Proceedings of the 2010 Winter Simulation Conference (WSC 2010)*, pages 688-696, December 2010.
[DOI:10.1109/WSC.2010.5679120](https://doi.org/10.1109/WSC.2010.5679120) (acceptance rate: 65%, citations: 17)
 41. **Miguel A. Erazo** and **Jason Liu**. On Enabling Real-Time Large-Scale Network Simulation in GENI: The PrimoGENI Approach (Poster Abstract), in *Proceedings of the 3rd International ICST Conference on Simulation Tools and Techniques (SIMUTools 2010)*, 2 pages, March 2010.
[DOI:10.4108/ICST.SIMUTOOLS2010.8636](https://doi.org/10.4108/ICST.SIMUTOOLS2010.8636) (acceptance rate: *unknown*, citations: 3)
 42. **Jason Liu**, **Yue Li**, and **Ying He**. A Large-Scale Real-Time Network Simulation Study Using PRIME, in *Proceedings of the 2009 Winter Simulation Conference (WSC 2009)*, pages 797-806, December 2009.
[DOI:10.1109/WSC.2009.5429678](https://doi.org/10.1109/WSC.2009.5429678) (acceptance rate: 54%, citations: 26)
 43. **Yue Li**, Michael Liljenstam, and **Jason Liu**. Real-Time Security Exercises on a Realistic Interdomain Routing Experiment Platform, in *Proceedings of the 23rd Workshop on Principles of Advanced and Distributed Simulation (PADS 2009)*, pages 54-63, June 2009.
[DOI:10.1109/PADS.2009.12](https://doi.org/10.1109/PADS.2009.12) (acceptance rate: *unknown*, citations: 0, **best paper candidate**)
 44. **Ting Li** and **Jason Liu**. A Fluid Background Traffic Model, in *Proceedings of the 2009 IEEE International Conference on Communications (ICC 2009)*, 6 pages, June 2009.
[DOI:10.1109/ICC.2009.5198605](https://doi.org/10.1109/ICC.2009.5198605) (acceptance rate: 35%, citations: 3)
 45. **Miguel Erazo**, **Yue Li**, and **Jason Liu**. SVEET! A Scalable Virtualized Evaluation Environment for TCP, in *Proceedings of the 5th International Conference on Testbeds and Research Infrastructures for the Development of Networks and Communities (TridentCom 2009)*, 10 pages, April 2009.
[DOI:10.1109/TRIDENTCOM.2009.4976227](https://doi.org/10.1109/TRIDENTCOM.2009.4976227) (acceptance rate: 46%, citations: 46)
 46. **Yue Li**, **Jason Liu**, and Raju Rangaswami. Toward Scalable Routing Experiments with Real-Time Network Simulation, in *Proceedings of the 22nd Workshop on Principles of Advanced and Distributed Simulation (PADS 2008)*, pages 23-30, June 2008.
[DOI:10.1109/PADS.2008.25](https://doi.org/10.1109/PADS.2008.25) (acceptance rate: 40%, citations: 14)
 47. **Patrick Peschlow**, Peter Martini, and **Jason Liu**. Interval Branching, in *Proceedings of the 22nd Workshop on Principles of Advanced and Distributed Simulation (PADS 2008)*, pages 99-108, June 2008.
[DOI:10.1109/PADS.2008.8](https://doi.org/10.1109/PADS.2008.8) (acceptance rate: 40%, citations: 7)
 48. **Jason Liu**. A Primer for Real-Time Simulation of Large-Scale Networks, in *Proceedings of the 41st Annual Simulation Symposium (ANSS 2008)*, part of the 2008 Spring Simulation Multiconference, pages 85-94, April 2008.
[DOI:10.1109/ANSS-41.2008.18](https://doi.org/10.1109/ANSS-41.2008.18) (acceptance rate: 48%, citations: 40)
 49. **Jason Liu**. Immersive Real-Time Large-Scale Network Simulation: A Research Summary, in *Proceedings of the 22nd IEEE International Parallel and Distributed Processing Symposium*

(IPDPS 2008), *NSF NGS Workshop*, 5 pages, April 2008.

[DOI:10.1109/IPDPS.2008.4536406](https://doi.org/10.1109/IPDPS.2008.4536406) (acceptance rate: *unknown*, citations: 12)

After Joining FIU ↑

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50. **Jason Liu**. Parallel Simulation of Hybrid Network Traffic Models, in *Proceedings of the 21st Workshop on Principles of Advanced and Distributed Simulation (PADS 2007)*, pages 141-151, June 2007.
[DOI:10.1109/PADS.2007.26](https://doi.org/10.1109/PADS.2007.26) (acceptance rate: 65%, citations: 14, **best paper candidate**)
 51. **Jason Liu**, **Scott Mann**, **Nathanael Van Vorst**, and **Keith Hellman**. An Open and Scalable Emulation Infrastructure for Large-Scale Real-Time Network Simulations, in *Proceedings of 2007 IEEE International Conference on Computer Communications (INFOCOM 2007) MiniSymposium*, pages 2471-2475, May 2007.
[DOI:10.1109/INFCOM.2007.304](https://doi.org/10.1109/INFCOM.2007.304) (acceptance rate: 25%, citations: 43)
 52. **Jason Liu**. Packet-Level Integration of Fluid TCP Models in Real-Time Network Simulation, in *Proceedings of the 2006 Winter Simulation Conference (WSC 2006)*, pages 2162-2169, December 2006.
[DOI:10.1109/WSC.2006.323017](https://doi.org/10.1109/WSC.2006.323017) (acceptance rate: 70%, citations: 35)
 53. David M. Nicol, Michael Liljenstam and **Jason Liu**. Advanced Concepts in Large-Scale Network Simulation, in *Proceedings of 2005 Winter Simulation Conference (WSC 2005)*, pages 153-166, December 2005.
[DOI:10.1109/WSC.2005.1574248](https://doi.org/10.1109/WSC.2005.1574248) (acceptance rate: 66%, citations: 46)
 54. Michael Liljenstam, **Jason Liu**, David Nicol, Yougu Yuan, Guanhua Yan, and Chris Grier. RINSE: the Real-Time Interactive Network Simulation Environment for Network Security Exercises, in *Proceedings of the 19th Workshop on Principles of Advanced and Distributed Simulation (PADS 2005)*, pages 119-128, June 2005.
[DOI:10.1109/PADS.2005.23](https://doi.org/10.1109/PADS.2005.23) (acceptance rate: 65%, citations: 78, **best paper candidate**)
 55. Robert S. Gray, David Kotz, Calvin C. Newport, Nikita Dubrovsky, Aaron Fiske, **Jason Liu**, Christopher Masone, Susan McGrath, and Yougu Yuan. Outdoor Experimental Comparison of Four Ad hoc Routing Algorithms, in *Proceedings of the 7th ACM/IEEE International Symposium on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWiM 2004)*, pages 220-229, October 2004.
[DOI: 10.1145/1023663.1023703](https://doi.org/10.1145/1023663.1023703) (acceptance rate: 17%, citations: 193, **best paper candidate**)
 56. David Kotz, Calvin Newport, Robert S. Gray, **Jason Liu**, Yougu Yuan, and Chip Elliott. Experimental Evaluation of Wireless Simulation Assumptions, in *Proceedings of the 7th ACM/IEEE International Symposium on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWiM 2004)*, pages 78-82, October 2004.
[DOI:10.1145/1023663.1023679](https://doi.org/10.1145/1023663.1023679) (acceptance rate: 17%, citations: 613)
 57. **Jason Liu**, Yougu Yuan, David M. Nicol, Robert S. Gray, Calvin C. Newport, David F. Kotz, and Luiz Felipe Perrone. Simulation Validation Using Direct Execution of Wireless Ad-hoc Routing Protocols, in *Proceedings of the 18th Workshop on Parallel and Distributed Simulation (PADS 2004)*, pages 7-16, May 2004.
[DOI:10.1109/PADS.2004.1301280](https://doi.org/10.1109/PADS.2004.1301280) (acceptance rate: 54%, citations: 85, **best paper candidate**)
 58. Michael Liljenstam, Jason Liu, and **David M. Nicol**. Development of an Internet Backbone Topology for Large-Scale Network Simulations, in *Proceedings of the 2003 Winter Simulation*

- Conference (WSC 2003)*, pages 694-702, December 2003.
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59. David M. Nicol, **Jason Liu**, Michael Liljenstam, and Guanhua Yan. Simulation of Large-Scale Networks Using SSF, in *Proceedings of the 2003 Winter Simulation Conference (WSC 2003)*, pages 650-657, December 2003.
[DOI:10.1109/WSC.2003.1261480](https://doi.org/10.1109/WSC.2003.1261480) (acceptance rate: 68%, citations: 96)
60. David M. Nicol, Michael Liljenstam, and **Jason Liu**. Multiscale Modeling and Simulation of Worm Effects on the Internet Routing Infrastructure, in *Proceedings of the 13th International Conference on Modeling Techniques and Tools for Computer Performance Evaluation (Performance TOOLS 2003)*, pages 1-10, September 2003.
[DOI:10.1007/978-3-540-45232-4_1](https://doi.org/10.1007/978-3-540-45232-4_1) (acceptance rate: *unknown*, citations: 35)
61. Robert R. Henry, Simon H. Kahan, **Jason Liu**, David M. Nicol. An Implementation of the SSF Scalable Simulation Framework on the Cray MTA, in *Proceedings the 17th Workshop on Parallel and Distributed Simulation (PADS 2003)*, pages 77-85, June 2003.
[DOI:10.1109/PADS.2003.1207423](https://doi.org/10.1109/PADS.2003.1207423) (acceptance rate: 61%, citations: 6)
62. **Jason Liu** and David M. Nicol. Lookahead Revisited in Wireless Network Simulations, in *Proceedings of the 16th Workshop on Parallel and Distributed Simulation (PADS 2002)*, pages 79-88, May 2002.
[DOI:10.1109/PADS.2002.1004203](https://doi.org/10.1109/PADS.2002.1004203) (acceptance rate: 66%, citations: 45)
63. **Jason Liu**, David M. Nicol, Luiz Felipe Perrone, and Michael Liljenstam. Towards High Performance Modeling of the 802.11 Wireless Protocol, in *Proceedings of the 2001 Winter Simulation Conference (WSC 2001)*, pages 1315-1320, December 2001.
[DOI:10.1109/WSC.2001.977451](https://doi.org/10.1109/WSC.2001.977451) (acceptance rate: 72%, citations: 35)
64. **Jason Liu**, Felipe Perrone, David M. Nicol, Chip Elliot, and David Pearson. Simulation Modeling of Large-Scale Ad-hoc Sensor Networks, in *Proceedings of the European Simulation Interoperability Workshop 2001 (Euro-SIW 2001)*, 12 pages, June 2001.
(acceptance rate: *unknown*, citations: 95)
65. **Jason Liu**, David M. Nicol, and King Tan. Lock-Free Scheduling of Logical Processes in Parallel Simulation, in *Proceedings of the 15th Workshop on Parallel and Distributed Simulation (PADS 2001)*, pages 22-31, May 2001.
[DOI:10.1109/PADS.2001.924618](https://doi.org/10.1109/PADS.2001.924618) (acceptance rate: 68%, citations: 26)
66. **Jason Liu** and David M. Nicol. Learning Not to Share, in *Proceedings of the 15th Workshop on Parallel and Distributed Simulation (PADS 2001)*, pages 46-55, May 2001.
[DOI:10.1109/PADS.2001.924620](https://doi.org/10.1109/PADS.2001.924620) (acceptance rate: 68%, citations: 30)
67. David M. Nicol, **Jason Liu**, and James Cowie. Safe Timestamps and Large-Scale Modeling, in *Proceedings of the 14th Workshop on Parallel and Distributed Simulation (PADS 2000)*, pages 71-78, May 2000.
[DOI:10.1109/PADS.2000.847146](https://doi.org/10.1109/PADS.2000.847146) (acceptance rate: 53%, citations: 6)
68. James Cowie, Hongbo Liu, **Jason Liu**, David Nicol, and Andy Ogielski. Towards Realistic Million-Node Internet Simulations, in *Proceedings of the 1999 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA 1999)*, 9 pages, June/July 1999.
(acceptance rate: *unknown*, citations: 165)
69. **Jason Liu**, David M. Nicol, Brian J. Premore, and Anna L. Poplawski. Performance Prediction of a Parallel Simulator, in *Proceedings of the 13th Workshop on Parallel and*

Distributed Simulation (PADS 1999), pages 156-164, May 1999.

[DOI:10.1109/PADS.1999.766172](https://doi.org/10.1109/PADS.1999.766172) (acceptance rate: 50%, citations: 55)

70. David M. Nicol and **Xiaowen Liu**. The Dark Side of Risk (What Your Mother Never Told You about Time Warp), in *Proceedings of the 11th Workshop on Parallel and Distributed Simulation (PADS 1997)*, pages 188-195, May 1997.

[DOI:10.1109/PADS.1997.594606](https://doi.org/10.1109/PADS.1997.594606) (acceptance rate: 57%, citations: 61)

71. David M. Nicol and **Jason X. Liu**. Parallelizable Execution-Driven Simulation of Threaded Distributed Memory Parallel Computations, in *Proceedings of the 4th International Workshop on Modeling, Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS 1996)*, pages 174-178, February 1996.

[DOI:10.1109/MASCOT.1996.501013](https://doi.org/10.1109/MASCOT.1996.501013) (acceptance rate: *unknown*, citations: 2)

Chapters in Books

1. **Jason Liu**. Parallel Discrete-Event Simulation, *Wiley Encyclopedia of Operations Research and Management Science*, edited by James J. Cochran. John Wiley & Sons, ISBN: 978-0-470-40063-0. March 2011, 21 pages.

[DOI:10.1002/9780470400531](https://doi.org/10.1002/9780470400531) (citations: 28)

2. Jason Liu. Parallel and Distributed Immersive Real-Time Simulation of Large-Scale Networks, *Parallel and Distributed Computing*, edited by Alberto Ros Bardisa. ISBN: 978-953-307-057-5, January 2010, pp. 221-245.

[DOI:10.5772/9453](https://doi.org/10.5772/9453) (citations: 0)

Government Reports or Monographs

N/A

Book Reviews

N/A

OTHER PUBLICATIONS

Thesis

1. **Xiaowen (Jason) Liu**. Improvements in Conservative Parallel Simulation of Large-Scale Models, Ph.D. Thesis, Dartmouth College, February 2003. Advisor: David M. Nicol.

Technical Reports

1. **Jason Liu**, and Raju Rangaswami. Model-Driven Network Emulation with Virtual Time Machine, Technical Report TR-2009-03-01, School of Computing and Information Sciences, Florida International University, March 2009.

2. Robert S. Gray, David Kotz, Calvin Newport, Nikita Dubrovsky, Aaron Fiske, **Jason Liu**, Christopher Masone, Susan McGrath, and Yougu Yuan. Outdoor Experimental Comparison of Four Ad hoc Routing Algorithms, Technical Report TR2004-511, Department of Computer Science, Dartmouth College, June 2004.
3. David Kotz, Calvin Newport, Robert S. Gray, **Jason Liu**, Yougu Yuan, and Chip Elliott. Experimental Evaluation of Wireless Simulation Assumptions. Technical Report TR2004-507, Department of Computer Science, Dartmouth College, June 2004.
4. **Xiaowen Liu**, David M. Nicol, and King Tan. Lock-Free Scheduling of Logical Processes in Parallel Simulation. Technical Report TR2001-385, Department of Computer Science, Dartmouth College, January 2001.
5. **Xiaowen Liu**, Charles B. Owen, and Fillia Makedon. Automatic Video Pause Detection Filter. Technical Report PCS-TR97-307, Department of Computer Science, Dartmouth College, February 1997.
6. Brian J. Premore, David M. Nicol, and **Xiaowen Liu**. A Critique of the Telecommunications Description Language (TeD). Technical Report PCS-TR96-299, Department of Computer Science, Dartmouth College, November 1996.
7. David M. Nicol and **Xiaowen Liu**. The Dark Side of Risk (What Your Mother Never Told You about Time Warp). Technical Report PCS-TR96-298, Department of Computer Science, Dartmouth College, November 1996.

PRESENTED PAPERS, AND LECTURES

Invited Presentations

1. High-Performance Modeling and Simulation of Computer Networks, **Universidade Federal de São Carlos (UFSCar)**, Brazil, March 2018.
2. Faster and Better Hybrid Testbeds for Future Network Research, **Beijing University of Posts and Telecommunications**, Future Network Theory and Application Laboratory (FNL), Beijing, China, June 2017.
3. High-Performance Modeling and Simulation of Computer Networks, **Tsinghua University**, Department of Computer Science, Beijing, China, May 2017.
4. High-Performance Modeling and Simulation of Computer Networks, **Laboratory of Information, Networking and Communication Sciences (LINCS)**, Paris, France, April 2017.
5. Codesign Performance Prediction for Computational Physics, 3rd Year Review - Interconnect Models, **Los Alamos National Laboratory**, Los Alamos, New Mexico, January 2017.
6. Symbiotic Modeling and High-Performance Simulation, **Colorado School of Mines**, Golden, Colorado, January 2017.
7. Modeling and Simulation with Performance & Accuracy Tradeoff, **Arizona State University**, Tempe, Arizona, November 2016.
8. Interconnect Model and Integration of MPI Applications, **Los Alamos National Laboratory**, Los Alamos, New Mexico, January 2016.
9. What About High-Performance Network Simulation, Seriously? **Oak Ridge National Laboratory**, Oak Ridge, Tennessee, July 2014.

10. Introduction to Parallel Simulation of Large-Scale Networks. **Huawei Co.**, Chengdu, China, April 2012.
11. Can We Really Model the Internet? **Florida International University**, School of Computing and Information Sciences, Miami, Florida, October 2011.
12. Parallel Simulation and High-Performance Network Modeling, **Beijing University of Technology**, Beijing, China, June 2011.
13. Parallel Simulation and High-Performance Network Modeling, **Tsinghua University**, Beijing, China, June 2011.
14. Parallel Simulation and High-Performance Network Modeling, **Beihang University**, Beijing, China, June 2011.
15. Parallel Simulation and High-Performance Network Modeling, **National University of Defense Technology**, Changsha, China, July 2011.
16. Parallel Simulation Toward Extreme-Scale Network Experimentation. **Los Alamos National Laboratory**, Los Alamos, New Mexico, May 2010.
17. Parallel Simulation Toward Extreme-Scale Network Experimentation. **Sandia National Laboratories**, Albuquerque, New Mexico, May 2010.
18. Model-Driven Emulation of Large-Scale Networks. **University of Bonn**, Bonn, Germany, June 2009.
19. Somewhere between Network Simulation and Emulation. **Florida International University**, Telecommunications and Information Technology Institute (IT2), Miami, Florida, February 2008.
20. The PRIME Project & Hybrid Traffic Modeling. **Florida International University**, School of Computing and Information Sciences, Miami, Florida, October 2007.
21. Immersive Real-Time Network Simulation. **Sandia National Laboratories**, Albuquerque, New Mexico, July 2007.
22. The PRIME Research: Virtually All for Real. **Florida International University**, School of Computing and Information Sciences, Miami, Florida, April 2007.
23. PRIME Time Research: Virtually All for Real. **Colorado School of Mines**, Department of Mathematical and Computer Sciences, Golden, Colorado, January 2007.
24. Parallel Real-Time Immersive Network Modeling Environment (PRIME). **University of Colorado at Boulder**, Boulder, Colorado, Department of Computer Science, September 2006.
25. Parallel Real-Time Immersive Network Modeling Environment (PRIME). **Los Alamos National Laboratory**, Los Alamos, New Mexico, August 2006.
26. Toward Parallel Real-Time Simulation of Global-Scale Networks. **University of Colorado at Denver**, Department of Computer Science and Engineering, Denver, Colorado, February 2005.
27. The “Real” Life of Network Simulations: Research in Real-Time Network Simulations and Validations. **Colorado School of Mines**, Department of Mathematical and Computer Sciences, Golden, Colorado, January 2005.
28. Riding the Curve: Scalable Parallel Simulation for Networking Research. **Colorado School of Mines**, Golden, Colorado, Department of Mathematical and Computer Sciences, March 2004.
29. Riding the Curve: Scalable Parallel Simulation for Networking Research. **Virginia Polytechnic Institute and State University**, Department of Computer Science, Blacksburg, Virginia, March 2004.
30. Parallel Simulation Using DaSSF. **Cray Inc.**, Seattle, Washington, April 2002.

31. DaSSF and Simulation of Large-Scale Wireless Ad-hoc Networks. **BBN Technologies**, Cambridge, Massachusetts, February 2002.
32. Enabling Large-Scale Discrete-Event Simulation with DaSSF. **Los Alamos National Laboratory**, Los Alamos, New Mexico, January 2002.

Invited Conference/Meeting Presentations

1. Hybrid Network Modeling and Simulation for Scale, *2nd Global Future Network Development Summit*, Nanjing, China, May 2018.
2. Virtual Time Machine for Large-Scale Reproducible Distributed Emulation, *2017 GEFI (Global Experimentation for Future Internet) Workshop*, Rio de Janeiro, Brazil, October 2017.
3. Extending PrimoGENI for Symbiotic Distributed Network Emulation, *GENI Regional Workshop*, Miami, Florida, March 2017.
4. Toward Integrated Multi-resolution HPC Modeling for Rapid Performance Prediction, *Workshop on Modeling & Simulation of Systems and Applications*, Seattle, Washington, August 2016.
5. Integrated Modeling for Rapid Assessment and Performance Prediction of HPC Applications, *Salishan Conference on High-Speed Computing*, Gleneden Beach, Oregon, April 2016.
6. Scalable Experimentation of SDN Applications, *2016 GEFI (Global Experimentation for Future Internet) Workshop*, Brussels, Belgium, April 2016.
7. High-Performance Simulation & Modeling of Computer Systems and Computer Networks at Scale, *CENTRA Kickoff Meeting*, Taipei, Taiwan, March 2016.
8. Applications of Future Network Technologies to Disaster Management, *NSF Workshop on Looking Beyond the Internet: Applications and Services in the Year 2021*, Washington, DC, January 2016.
9. Scalable Emulation of SDN Applications with Simulation Symbiosis, *2nd SwitchOn Workshop*, Sao Paulo, Brazil, October 2015.
10. Introducing SwitchOn Project for Strengthening US-Brazil Collaborations for Future Network Research, *WPEIF Workshop at SBRC'15*, Vitoria, Brazil, May 2015.
11. PrimoGENI, Plenary Talk, *13th GENI Engineering Conference (GEC)*, Los Angeles, CA, March 2012.

CREATIVE WORK

N/A

WORKS IN PROGRESS

Submitted Papers

1. Kishwar Ahmed, Jesse Bull, and **Jason Liu**. Contract-Based Demand Response Model for HPC Systems, submitted for publication.

Pending Research Proposals

N/A

FUNDED RESEARCH

1. Center for Advancing Education and Studies on Critical Infrastructures Resilience, Department of Homeland Security (2017-ST-062-000002). \$1.2M. 2017.8–2022.7. PI: **Jason Liu**; Co-PIs: S.S. Iyengar, Scott Graham, Leonardo Bobadilla, Bogdan Carbutar, Mark Finlayson, Liting Hu, Monique Ross, Ning Xie.
2. GENI Engineering Conference 25. National Science Foundation (CNS-1724805). \$50K. 2017.2–2018.2. PI: Julio Ibarra; Co-PIs: Heidi Morgan, **Jason Liu**.
3. CSR: Medium: Collaborative Research: NVM-Enabled Host-Side Caches. National Science Foundation (CNS-1563883). \$648K. 2016.4–2019.5. PI: Raju Rangaswami; Co-PIs: Giri Narasimhan, and **Jason Liu** (33%).
4. Security Analyses and Applications of Complex Networks: From Theory to Practice. Florida Center for Cybersecurity at University of South Florida. \$25K. 2016.3–2017.12. PI: **Jason Liu**.
5. Creating and Composing SDN Security Modules. Florida Center for Cybersecurity at University of South Florida. \$25K. 2016.3–2017.12. PI: Wei Zeng (replacing Xin Sun); SI: **Jason Liu** (50%).
6. Scalable Discrete Event Simulation for Performance Prediction. Los Alamos National Laboratory. \$252K. 2014.10–2017.9. PI: **Jason Liu**.
7. Vulnerability and Survivability of Cyberspace: Basic Science to Applications. Florida Center for Cybersecurity at University of South Florida. \$25K. 2015.3–2016.8. PI: **Jason Liu** (replacing Ming Zhao).
8. EAGER: SwitchOn - Exploring and Strengthening US-Brazil Collaborations in Future Internet Research. National Science Foundation (CNS-1443285). \$200K. 2014.8–2018.2. PI: **Jason Liu**; Co-PIs: Julio Ibarra, Heidi Alvarez.
9. Enabling Time-sensitive Applications on Virtualized Computing Systems. Department of Defense (#W911NF-13-1-0157). \$643K. 2013.5–2017.4. PI: **Jason Liu** (replacing Dr. Ming Zhao).
10. PrimoGENI Constellation for Distributed At-Scale Hybrid Network Experimentation. National Science Foundation (through Raytheon/GENI Project Office, CNS-1346688). \$269K. 2013.10–2016.9. PI: **Jason Liu**.

After Promotion to Associate Professor at FIU ↑

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11. SoftPM: Streamlining High-End Computing with Software Persistent Memory. National Science Foundation (CCF-0937964). \$712K. 2009.9–2013.8. PI: Raju Rangaswami; Co-PIs: **Jason Liu** (33%), Ming Zhao.
 12. PrimoGENI--Developing GENI Aggregates for Real-time Large-scale Network Simulation. National Science Foundation (through Raytheon/GENI Project Office, CNS- 0714770). \$502K. 2009.10–2013.7. PI: **Jason Liu**; Co-PIs: Julio Ibarra, Heidi Alvarez.

13. CREST: Center for Innovative Information Systems Engineering, Subproject 5: Complex System Modeling, Analysis and Realization (CS-MAR). National Science Foundation (HRD-0833093). \$825K. 2008.8–2016.12. PI: Xudong He; Co-PIs: Shu-Ching Chen, Peter Clarke, **Jason Liu**, S. Masoud Sadjadi.
14. CAREER: Immersive Large-Scale Network Simulations. National Science Foundation (CNS-0546712, CNS-0836408). \$436K. 2006.3–2012.2. PI: **Jason Liu**.

PROPOSALS SUBMITTED BUT NOT FUNDED

1. CSR: Small: Coordinated Inter-Job and Intra-Job Scheduling for Heterogeneous Data Analytics Jobs on Multi-tenanted Datacenters. National Science Foundation. PI: Liting Hu; Co-PI: **Jason Liu**. Requested amount: \$500K, 2018.8–2021.7.
2. A National Supercomputing Accelerator Complex: An MSI Improbable Dream. National Science Foundation/UMBC. PI (at FIU): Naphtali Rishé; SI: **Jason Liu**. Requested amount: \$300K, 2018.10–2024.9.
3. Enabling Scalable Cybersecurity Studies via Hybrid Experimental Testbeds. University of Southern Florida. PI: Kaiqi Xiong (USF). Co-PI: Jason Liu. Requested amount: \$25,000. Project period: 2017-2018.
4. II-NEW: DIMP: Disaster Information Management and Processing Research Infrastructure, National Science Foundation. PI: Shu-Ching Chen. Co-PIs: Tao Li, **Jason Liu**, Steven Luis, Shahin Vassigh. Requested amount: \$775,824. Project period: 2017-2020.
5. Data-Driven Simulation Modeling and Scenario Analytics for Interdependent Critical Infrastructures. Department of Homeland Security/University of Illinois. PI: **Jason Liu**. Co-PIs: Shu-Ching Chen, Mark Finlayson, Steven Luis. Requested amount: \$326,496. Project period: 2017-2018.
6. US Ignite: Collaborative Research: Focus Area 1: Dynamic Hybrid Cloud Computing and Networking for Business Continuity under Extreme Events. National Science Foundation. PI: Jason Liu. Co-PIs: Steven Luis, Ming Zhao (ASU). Requested amount: \$320,253. Project period: 2017-2019.
7. NeTS: Small: Network Experimentation Symbiosis. National Science Foundation. PI: **Jason Liu**. Requested amount: \$396,816. Project period: 2016-2019.
8. II-NEW: Distributed Multi-Layer Research Infrastructure for Disaster Information Management, National Science Foundation. PI: Shu-Ching Chen. Co-PIs: Tao Li, **Jason Liu**, Steven Luis, Shahin Vassigh. Requested amount: \$728,746. Project period: 2016-2019.
9. SCADS: Scalable Deep Storage Hierarchy for Exascale Computing. Department of Energy. PI: Ming Zhao. Co-PIs: Raju Rangaswami, **Jason Liu**, Gerald Lofstead (SNL), Kevin Butler (UF). Requested amount: \$1,983,618. Project period: 2016-2019.
10. NeTS:Small:Network Experimentation Symbiosis. National Science Foundation. PI: **Jason Liu**. Requested amount: \$420,080. Project period: 2015-2018.
11. NeTS:Small:Augmenting TCP with SDN. National Science Foundation. PI: **Jason Liu**. Co-PI: Xin Sun. Requested amount: \$499,946. Project period: 2015-2018.
12. Co-Design of Security Aware Power System Distribution Architectures as Cyber Physical Systems. National Science Foundation. PI: Osama Mohammed. Co-PI: **Jason Liu**. Requested amount: \$598,639. Project period: 2014-2017.
13. NeTS:Small:Streamlining High-Fidelity Network Experimentation and Exploration through

- Symbiotic Simulation. National Science Foundation. PI: **Jason Liu**. Requested amount: \$367,877. Project period: 2014-2017.
14. NeTS:Small:Spatio-Temporal Background Traffic Modeling for At-Scale Network Experimentation. National Science Foundation. PI: **Jason Liu**. Requested amount: \$236,777. Project period: 2014-2017.
 15. CC*IIE Integration: PantherNet - Integrating FIU Campus Cyber-Infrastructure for Multi-Disciplinary Science and Education. National Science Foundation. PI: **Jason Liu**. Co-PIs: Deng Pan, Shaolei Ren, Xin Sun, Ming Zhao, Robert Burgman, Julio Ibarra, James Webb, Naphtali Rishe. Requested amount: \$966,421. Project period: 2014-2016.
 16. FIU Center of Excellence: Cyber Security. Air Force Research Laboratory. PI: S.S.Iyengar, Co-PIs: **Jason Liu** (and many others). Requested amount: \$5,000,000. Project period: 2015-2019.
 17. Center of Excellence: Research Data Analysis. Air Force Research Laboratory. PI: S.S. Iyengar, Co-PIs: **Jason Liu** (and many others). Requested amount: \$4,999,281. Project period: 2015-2019.
 18. National Critical Infrastructure Resilience Center of Excellence. Department of Homeland Security. PI: David Nicol (UIUC). Co-PIs: **Jason Liu** (and many others). Requested amount: \$500,000. 2015-2020.
 19. II-NEW: Distributed Multi-Layer Research Infrastructure for Disaster Information Management. National Science Foundation. PI: Shu-Ching Chen. Co-PIs: Tao Li, **Jason Liu**, Winifred Newman, Ming Zhao. Requested amount: \$749,953. Project period: 2015-2018.
 20. A Symbiotic Approach to High-Fidelity High-Performance Study of Large-Scale Cyberspace Systems, Department of Defense. PI: **Jason Liu**. Requested amount: 650,000. Project period: 2013-2015.
 21. CSR:Medium:Collaborative Research:A Virtual Time Machine for Network Design and Testing with High Fidelity and Performance. National Science Foundation. PI: **Jason Liu**. Co-PIs: David Nicol (UIUC), Yan Luo (UMASS Lowell). Requested amount: 409,793. Project period: 2013-2016.
 22. Promoting Decentralized and Targeted Advertising on Peer-to-Peer Content Distribution Networks. Global Entrepreneurship Center, Florida International University, Kauffman Professors, PI: **Jason Liu**. Requested amount: \$10,000. Project period: 2012-2013..
 23. Collaborative Research: II-NEW: NEST: Hybrid Network Emulation and Simulation Testbed Using Programmable Network Accelerators. PI: Yan Luo (UMASS Lowell). Co-PIs: **Jason Liu**, Deng Pan, Xuzhou Chen (Fitchburg State College). National Science Foundation. Request amount: \$301,652. Project period: 2012-2014.
 24. NeTS:Medium:A Virtual Time Machine for Model-Driven Network Emulation. National Science Foundation. PI: **Jason Liu**. Co-PIs: Raju Rangaswami, Ming Zhao. Request amount: \$996,257. Project period: 2011-2015.
 25. NeTS:Small:Data Center Networking with Traffic Differentiation and Multipath Scheduling. National Science Foundation. PI: Deng Pan. Co-PI: **Jason Liu**. Request amount: \$463,911. Project period: 2011-2014.
 26. RAPIDA: a GENI inter-Regional Accelerant for Prototyping and Infrastructure Development in the Americas. National Science Foundation (through GENI Project Office). PI: Julio Ibarra. Co-PIs: **Jason Liu** (among others). Requested amount: \$299,376. Project period: 2011-2014.
 27. Collaborative Research: II-NEW: NEST: Hybrid Network Emulation and Simulation Testbed Using Programmable Network Processors on Multicore Platforms. National Science

Foundation, CNS-1059243. PI: Yan Luo (UMASS Lowell). Co-PIs: **Jason Liu**, and Xuzhou Chen (Fitchburg State College). Requested amount: \$558,826 (FIU's share: \$254,243). Project period: 2011-2013.

28. MRI: Development of a Near-Real-time Coastal Storm Surge Forecasting System. National Science Foundation, CNS-1040010. PI: Keqi Zhang. Co-PIs: Shu-Ching Chen, Tao Li, **Jason Liu**, and Ming Zhao. Requested amount: \$2,630,900. Project period: 2011-2014.

After Promotion to Associate Professor at FIU ↑

29. Collaborative Research: EAGER: Massive-Scale GENI Experimentation of Location Based Video Streaming on Content Distribution Networks. National Science Foundation, CNS-1049991. PI: **Jason Liu**. Co-PIs: Yan Luo and Guanling Chen (UMASS Lowell). Requested amount: \$108,409. Project period: 2010-2012.
30. NeTS:Small:A Virtual Time Machine for Model-Driven Network Emulation. National Science Foundation, CNS-1018335. PI: **Jason Liu**. Co-PIs: Raju Rangaswami, Ming Zhao. Requested amount: \$500,000. Project period: 2010-2013.
31. Collaborative Research: II-NEW: High-Performance Network Experimentation Testbed Using Programmable Network Processors on Multicore Platforms. National Science Foundation, CNS-0958521. PI: Yan Luo (UMASS Lowell). Co-PIs: **Jason Liu**, and Xuzhou Chen (Fitchburg State College). Requested amount: \$720,333 (FIU's share: \$299,364). Project period: 2010-2013.
32. Pivoting Extreme-Scale Network Experimentation. PI: **Jason Liu**. Department of Energy. Requested amount: \$874,264. Project period: 2010-2015.
33. Collaborative Research: II-NEW: AQUANET -- Aquatic Network Experimentation Testbed. PI: **Jason Liu**. Co-PIs: Tracy Camp and Jon Collis (Colorado School of Mines). National Science Foundation, CNS-0855173. Requested amount: \$691,161 (FIU's share: \$210,819). Project period: 2009-2012.
34. Collaborative Research: Network Science Collaborative Technology Alliance (NS CTA). PI: Shivendra S. Panwar (Polytechnic Institute of NYU). Co-PIs: **Jason Liu** (among others). US Army Research Laboratory. Requested amount: \$16,750,000 (FIU's share: \$1,932,529). Project period: 2010-2014.
35. Promoting Decentralized and Targeted Advertising on Peer-to-Peer Content Distribution Networks. PI: **Jason Liu**. Global Entrepreneurship Center, Florida International University, Kauffman Professors, Requested amount: \$15,000. Project period: 2009-2010.
36. Research Experiences for Undergraduates: Autonomic Computing Research at FIU. PI: Masoud Milani. Senior Investigators: **Jason Liu** (among others). National Science Foundation, DUE-0851624. Requested amount: \$389,214. Project period: 2009-2012.
37. Collaborative Research: II-NEW: AQUANET -- Aquatic Network Experimentation Testbed. National Science Foundation, CNS-0855173. PI: **Jason Liu**. Requested amount: \$210,819. Project period: 2009-2012.
38. NeTS-NECO: A Virtual Time Machine for Model-Driven Network Emulation: Leveraging Computing Infrastructure for Networking Research. National Science Foundation, CNS-0831784. PI: **Jason Liu**, Co-PI: Raju Rangaswami. Requested amount: \$448,485. Project period: 2008-2011.
39. Collaborative Research: NeTS-NEDG: AQUANET -- Aquatic Network Experimentation Testbed. National Science Foundation, CNS-0831850. PI: **Jason Liu**. Requested amount:

\$183,317. Project period: 2008-2011.

40. Florida CoE of Information Technologies for Disaster Resilient Business Communities. State of Florida. PI: Yi Deng. Senior Investigators: **Jason Liu** (among others). Requested amount: \$10,000,000. Project period: 2008-2011.
41. Center of Excellence for High Performance Computing. State of Florida. PI: Borko Furht, Senior Investigators: **Jason Liu** (among others). Requested amount: \$15,000,000. Project period: 2008-2011.
42. A Distributed Virtual Testbed for High-Speed TCP Variants. Cisco Research. PI: **Jason Liu**. Requested amount: \$331,087. Project Period: 2008-2009.
43. CRI:IAD: A Performance Realization, Evaluation, and Simulation Testbed for Applications with Grid Enablement (PRESTAGE). National Science Foundation, CNS-0751108. PI: **Jason Liu**, Co-PI: Tao Li, Raju Rangaswami, Masoud Sadjadi, and Ping Zhu. Requested amount: \$797,370. Project period: 2008-2011.

After Joining FIU ↑

44. NeTS-WN: AQUANET -- Aquatic Network Experimentation Testbed. National Science Foundation, CNS-0722016. PI: **Jason Liu**, Co-PI: Tracy Camp (Colorado School of Mines). Requested amount: \$832,103. Project period: 2007-2010.
45. Meta-modeling in Simulation of Systems of Networks. Department of Homeland Security, ONR BAA 06-003. PI: David M. Nicol (University of Illinois, Urbana- Champaign). Sub-Awardees: **Jason Liu** among others. Requested amount: \$2,400,000. Project period: 2006-2009.
46. A Hybrid Testbed for Large-Scale Network Applications. Cisco Research. PI: **Jason Liu**. Requested amount: \$95,133. Project period: 2007.
47. CCLI: Parallel Real-time Interactive Modeling Education (PRIME) Laboratory Using Large-Scale Network Simulation Experimentation Testbed for Computer Networks Courses. National Science Foundation, DUE-0536177. PI: **Jason Liu**. Requested amount: \$149,879. Project period: 2006- 2007.
48. A Real-Time Interactive Simulation Testbed for Ultra High-Speed Networks Supporting Distributed Large-Scale Science Applications. Department of Energy. PI: **Jason Liu**. Requested amount: \$300,000. Project period: 2005-2008.
49. High-Performance Simulation, Emulation, and Advanced Modeling (HiPerSEAM) Lab. Colorado School of Mines Technology Fee Committee. PI: **Jason Liu**. Requested amount: \$53,639. Project period: 2005.

PATENT DISCLOSURES, APPLICATIONS, AND AWARDS

N/A

PROFESSIONAL HONORS, PRIZES, FELLOWSHIPS

- Honorary Visiting Professor, Tsinghua University, 2017-2020.
- ACM Distinguished Scientist, 2014.

- SIGSIM-PADS Best Paper Award, 2014.
- CNS Best Paper Award, 2012.
- FIU 2010 Top Scholars in Research, 2010.
- FIU SCIS Excellence in Service Award, 2009.
- NSF CAREER Award, 2006.
- Beijing Outstanding Student Award in Physics and Engineering, 1992.
- University Academic Excellence Awards, Beijing University of Technology, 1990–1993.

OFFICES HELD IN PROFESSIONAL SOCIETIES

N/A

OTHER PROFESSIONAL ACTIVITIES AND PUBLIC SERVICE

Conference Organization

- **General Chair**, ACM SIGSIM Conference on Principles of Advanced Discrete Simulation (SIGSIM-PADS), 2020.
- **Program Co-Chair**, ACM SIGSIM Conference on Principles of Advanced Discrete Simulation (SIGSIM-PADS), 2019.
- **Track Coordinator**, 2017 Winter Simulation Conference (WSC 2017), Modeling Methodology Track, Las Vegas, NV, December 3-6, 2017.
- **Local Coordinator**, 25th GENI Engineering Conference (GEC25), Miami, Florida, March 13-15, 2017.
- **General Chair**, 2nd NSF SwitchOn Workshop, São Paulo, Brazil, October 15-16, 2015.
- **General Chair**, 1st NSF SwitchOn Workshop, Miami, Florida, January 8-9, 2015.
- **Track Coordinator**, 2014 Winter Simulation Conference (WSC 2014), Networks and Communications Track, Savannah, GA, December 7-10, 2014.
- **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 2006), 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.

Editorial Boards and Steering Committees

- **Associate Editor**, IEEE Networking Letters, to start in 2019.
- **Associate Editor**, ACM Transactions on Modeling and Computer Simulation (TOMACS), since 2014.
- **Associate Editor**, Simulation: Transactions of the Society for Modeling and Simulation International, since 2009.
- **Associate Editor**, International Journal of Multimedia, since 2015.
- **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 (SIGSIM-PADS), since 2013.
- **Steering Committee Member**, ACM/IEEE/SCS Workshop on Principles of Advanced and Distributed Simulation (PADS), 2008-2012.

Conference Program Committees

- ACM SIGSIM Conference on Principles of Advanced Discrete Simulation (SIGSIM-PADS), 2016-2018.
- ACM/IEEE/SCS Workshop on Principles of Advanced and Distributed Simulation (PADS), 2005-2015.
- IEEE/ACM International Symposium on Modeling, Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS), 2009-2012, 2015, 2017, 2018.
- IEEE International Parallel & Distributed Processing Symposium (IPDPS), 2017.
- IEEE/IFIP International Conference on Dependable Systems and Networks (DSN), 2013.
- IEEE Conference on Local Computer Networks (LCN), 2008-2012, 2015-2018.
- International Conference on Testbeds and Research Infrastructures for the Development of Networks and Communities (TRIDENTCOM), 2009-2011, 2015.
- IEEE/ACM International Symposium on Distributed Simulation and Real-time Applications (DS-RT), 2008-2012.
- ICST International Conference on Simulation Tools and Techniques (SIMUTools), 2009-2012, 2016-2017.
- Winter Simulation Conference (WSC), 2012, 2017, 2018
- Others (many others unaccounted for): SIMULTECH 2015; HPCC 2011, 2012; ICC 2012; SN 2008-2011; DCPerf 2011; ChinaCom 2009, 2010; WCNC 2010, 2011; ICISTM 2009; ICNSC 2008, 2009; ICCCN 2008-2011, 2015; IWCMC 2007; AsiaSim 2013

Grant Proposal Reviewer/Panelist

- National Science Foundation: 2007, 2008, 2009, 2015, 2016 (x2), 2018
- Army Research Office: 2017
- Florida Center for Cybersecurity at University of South Florida: 2017

Textbook Reviewer

- Building Parallel Programs SMPs, Clusters, and Java, by Alan Kaminsky, Thomson Publisher, January/February, 2007.

Journal Paper Reviewer (not as editor)

- ACM Computing Surveys
- IEEE Transactions on Parallel and Distributed Systems
- IEEE Communication Letters
- IEEE Wireless Communication Magazine
- International Journal of Computer Systems Science and Engineering (IJCSSE)
- Elsevier Simulation Modelling Practice and Theory (SIMPAT)
- Elsevier Journal of Systems and Software (JSS)
- Journal for Defense Modeling and Simulation (JDMS)
- Journal of Parallel and Distributed Computing (JPDC)
- Mobile Networks and Applications (MONET)
- International Journal of Computers and Applications

Conference Paper Reviewer (not as TPC member)

- IEEE Workshop on Parallel and Distributed Simulation (PADS)
- International Symposium on Modeling, Analysis, and Simulation of Computer and Telecommunication Systems (MASCOTS)
- Winter Simulation Conference (WSC)
- International Conference on Mobile Systems, Applications, and Services (MobiSys)
- IEEE Wireless Communications and Networking Conference (WCNC)
- IEEE Global Telecommunications Conference (GLOBECOM)
- ACM International Workshop on Vehicular Ad Hoc Network (VANET)
- European Workshop on Wireless Sensor Networks (EWSN)
- International Conference on Simulation Tools and Techniques (SIMUTools)

University, College, and Department Services

- Graduate Program Director, School of Computing and Information Sciences (SCIS), 2018-current
- Colloquium Series Coordinator, School of Computing and Information Sciences (SCIS), 2009-2010, 2017-current
- Faculty Council on Governance, College of Engineering and Computing (CEC), 2011-2013, 2015-2016, 2018-current
- Infrastructure Committee, School of Computing and Information Sciences (SCIS), 2007-2009, 2014-2016

- Human Resource Committee, School of Computing and Information Sciences (SCIS), 2014-2015
- Cybersecurity Program Committee, School of Computing and Information Sciences (SCIS), 2013-2014
- College Tenure & Promotion Committee, College of Engineering and Computing (CEC), 2013-2014
- Grants/Center of Excellence Committee, School of Computing and Information Sciences (SCIS), 2013-2016
- Faculty Recruitment Committee, School of Computing and Information Sciences (SCIS), 2011-2013
- Graduate Committee, School of Computing and Information Sciences (SCIS), 2008-2009, 2010-2012
- Undergraduate Committee, School of Computing and Information Sciences (SCIS), 2007-2008