

CURRICULUM VITAE

Name: LAN WANG, University of Memphis	Department: COMPUTER SCIENCE
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EDUCATION

DEGREES	DISCIPLINE	INSTITUTION	YEAR
Ph.D.	Computer Science	University of California, Los Angeles	2004
M.S.	Computer Science	University of California, Los Angeles	1999
B.S.	Computer Science	Peking University, China	1997

EXPERIENCE

RANK/POSITION	DEPARTMENT/DIVISION	INSTITUTION/COMPANY/ORGANIZATION	PERIOD
Professor	Department of Computer Science	University of Memphis	9/2016 - present
Chair	Department of Computer Science	University of Memphis	2/2016 - Present
Associate Chair	Department of Computer Science	University of Memphis	8/2015 - 1/2016
Associate Professor	Department of Computer Science	University of Memphis	9/2010-present
Assistant Professor	Department of Computer Science	University of Memphis	8/2004-8/2010
Faculty Member	Center for Information Assurance (CFIA), Designated by NSA as a National Center of Academic Excellence in Information Systems Security Education and Research	University of Memphis	2005-present
Founding Member	CLION: Center of Large-Scale Complex Systems & Integrated Optimization Networks	University of Memphis	August 2009-present
Faculty Affiliate	Bioinformatics Program	University of Memphis	2006-present
Faculty Affiliate	Center for Community Health (CCH)	University of Memphis	2006-present
Faculty Affiliate	Center for Research on Women (CROW)	University of Memphis	Spring 2009-Present
Research Assistant	Computer Science Department	University of California, Los Angeles	8/1997-3/2004
Intern	Networking Division	USC / Information Sciences Institute	7/2003-9/2003
Intern	Networking Division	USC / Information Sciences Institute	6/2002-9/2002
Intern	Performance Management Group	IBM T. J. Watson Research Center	6/2000-9/2000

HONORS/AWARDS

HONOR/AWARD	INSTITUTION/COMPANY/ORGANIZATION	YEAR
CAS Travel Enrichment Grant	University of Memphis	2016
PI Millionaire	University of Memphis	2015
Early Career Research Award	College of Arts and Sciences, University of Memphis	2010
IEEE Senior Member	IEEE	2010
Fellowship for Women's Institute in Summer Enrichment (WISE)	NSF TRUST	2007
College of Arts and Science Travel Enrichment Award	University of Memphis	2007, 2016

IEEE ICNP Minority Faculty Travel Grant	NSF	2007
Who's Who in Sciences Higher Education	Academic Keys	2006
Travel Grant	ACM SIGCOMM IMW'02	2002
Second Best Student Poster Award	UCLA CSD Research Review	1999
Best Student Poster Award	UCLA CSD Research Review	1998
Aode Fellowship	Peking University	1996
Motorola Fellowship (First Class Award)	Peking University	1995
Distinguished Undergraduate Student Award	Peking University	1995

TEACHING EXPERIENCE

SUBJECT	INSTITUTION
COMP3825 Networking and Information Assurance (U) (Fall 2007, Fall 2008, Fall 2009, Fall 2010, Fall 2014, Fall 2015, Spring 2016, Fall 2016, Spring 2017, Fall 2017)	University of Memphis
COMP4/6601 Models of Computation (U/G) (Spring 2011, Fall 2012, Spring 2014)	University of Memphis
COMP4/6410: Computer Security (U/G) (Fall 2013)	University of Memphis
COMP7612: Foundations of Computing (G) (Spring 2013)	University of Memphis
COMP7/8311 Advanced Computer Networks (G) (Spring 2007, Spring 2008, Spring 2009, Spring 2012)	University of Memphis
COMP7311 Advanced Computer Networks (G) (Spring 2005, Spring 2006)	University of Memphis
COMP4/6310 Wireless Mobile Computing (U/G) (Fall 2006, Spring 2010, Spring 2015)	University of Memphis
COMP4/6302 Web Services and the Internet (U/G) (Spring 2006, Spring 2007)	University of Memphis
COMP4/6310 Introduction to Computer Networks (U/G) (Fall 2005)	University of Memphis
COMP2150 CS2 Data Structures (U) (Fall 2005, Fall 2006)	University of Memphis
COMP4/6302 Internet Applications/Java Programming (U/G) (Fall 2004, Spring 2005)	University of Memphis

STUDENT ADVISING/MENTORING

CURRENT DEGREE	NAME	YEAR OF GRADUATION
Postdoctoral Fellow	Dung Dinh Luong, Syed Obaid Amin (Research Advisor)	2005-2006, 2012-2014
PhD	Yaoqing Liu (PhD Dissertation Committee Chair)	2013
PhD	Laqin Fan, Mukhtadir R. Chowdhury, Minsheng Zhang, A. K. M. Mahmudul Hoque, Ernest A. McCracken, Jake Qualls (Academic and Research Advisor)	2021, 2018, 2013-2016, 2011-2014, 2009-2011, 2007-
PhD	Mark Myers, Derek Wong (Academic Advisor)	2011, 2014
PhD	Rajendra Banjade (PhD Dissertation Committee)	2017
PhD	Steven Ash, Mustafa Hajeer, Abhijit Nag, Nam Sy Vo, Ryan McCall, Nobal Niraula, Vivek Shandilya, Daqin Yun (PhD Dissertation Committee)	2017, 2016, 2016, 2016, 2015, 2015, 2015, 2015
PhD	Yi Gu, Mihai C. Lintean, Xukang Lu, Yunyue Lin, Mark Myers, Xiaodong Zhou, Hui Chen, Haizhon Li (PhD Dissertation Committee)	2013, 2011, 2012, 2011, 2011, 2011, 2006, 2005
PhD	Jake Qualls, Senhua Yu, Joe Burtleson, Rodrigo Silva, Kiran Bobba (PhD Qualifying Exam Committee)	2011, 2011, 2009, 2009, 2009
MS	Lei Pi, Minsheng Zhang, AKM Mahmudul Hoque, Yaoqing Liu (MS Thesis Committee Chair)	2017, 2016, 2014, 2011
MS	Ernest McCracken, Kriangsiri Malasri, Malleswari Saranu (MS Project Committee Chair)	2012, 2007, 2006
MS	Hanwen Yu, Tong Shu, Vivek Shandilya, Bhagavathy Krishna, Yunyue Lin, Yi Gu, Vivek Varma, Caleb Goodwin (MS Thesis Committee)	2015, 2014, 2011, 2010, 2009, 2008, 2008, 2007

MS	Kyle Cherry, Vincent Nkawu, Maria Luong, Suri Babu Nuthalapati, Mohammad Faisal Rahman (MS Project Committee)	2016, 2016, 2015, 2014, 2014
MS	Ankur Patel, Sriharsha Madamanchi, Swathi Bavanaka, Daniel Kay, Soujanya Medapati Medapati, Steve Ash, Praveen Kolla, Animikh Ghosh (MS Project Committee)	2013, 2012, 2011, 2010, 2010, 2010, 2010, 2010
MS	Raghu Teja Mylavarapu, Reshma Jangili, Wei Yin, Eddy Ochieng, Krishna Nerusu, Khaled Dajani, Rakshit Patel, Shweta Kumar (MS Project Committee)	2010, 2009, 2008, 2008, 2007, 2005, 2004, 2004
MS	Ernest A. McCracken (Academic and Research Advisor)	2012
MS	Sri Ram Gopal Annamreddi, Kyle Cherry (Academic Advisor)	2016, 2016
MS	Craig Kelly, Padma Deepika Annambhotla, Prashanthi Kodidela (Academic Advisor)	2018, 2015 (ended in 2014), 2015 (ended in 2013)
MS	Harish kumar Chaziyotil, Ramu Loke, Siddhartha Poreddy, Kuldeep Sharma, Venkata Krishna Aluri (Academic Advisor)	2012, 2011, 2011, 2011, 2011
MS	Geon Ahn, Muhammed Ceesay, Elliot Whaley, Hai Nguyen, Wei Yin, Elhadji Ba (Academic Advisor)	2012, 2012, 2011, 2009, 2008, 2008
BS	Alejandro Gil Torres, Michelle Daley, Vincent S. Lehman, Jorge D. Rivera, Kayla Marie Grieme, Adam Alyyan (Academic Advisor)	2016, 2015, 2014, 2015, 2015 (ended Fall 2013), 20
BS	Jacob Sutton, Gus Sanders, James E. Shaner, Cory J. Hymel (Academic Advisor)	2016 (ended Fall 2013), 2012, 2013 (ended 2012)
BS	Brandon S. Hamric, Kameishea Bigham, Sameh Awadeh, Christopher L. Smith (Academic Advisor)	2013 (ended 2011), 2012 (ended 2011), 2011, 2012
BS	Wesley Field, Ernest A. McCracken, Jon Seiler, Cody Travis, Charles Ellis, Benjamin A. Robinson, Ross Bell, Jessie D. Gillespie (Academic Advisor)	2009, 2009, 2011, 2013, 2012, 2011, 2012, 2011
BS	Ashlesh Gawande, Nicholas Gordon (Research Advisor)	2016, 2016

CREATIVE ACTIVITIES

ACTIVITY	DATES	LOCATION	SPONSORSHIP
Software: Named-Data Link State Routing Protocol (NLSR)	2014 - Present	http://named-data.net/doc/NLSR/current/	
Software: Mini-NDN	2015 - Present	https://github.com/named-data/mini-ndn	
Video: What routing strategies are being explored for NDN?	2015	https://vimeo.com/118961735	
Patent Application: EFFICIENT FORWARDING INFORMATION BASE CACHING SYSTEM AND METHOD (Yaoqing Liu and Lan Wang)	2013 (Provisional Patent), 2014 (Patent Pending)		University of Memphis
Patent No. 9491087: Devices and Methods for Forwarding Information Base Aggregation (Yaoqing Liu, Lan Wang, Beichuan Zhang, Xin Zhao)	2012 (provisional patent), 2013 (patent pending), 2016 (patent issued)		University of Memphis
US Patent No. 9557413: Surveillance Tracking System and Method (Robert Kozma, Lan Wang, Khan Iftakaruddin, Ross Deming, Orges Furxhi, Sergi Consul)	2011 (provisional patent); 2012 (regular patent application); 2017 (patent issued)		University of Memphis

Books Published

D. Jen, M. Meisel, D. Massey, **L. Wang**, B. Zhang, L. Zhang, "**Chapter 4: APT: A Practical Tunneling Architecture for Routing Scalability**", In M. Boucadair, & D. Binet (Eds.), *Solutions for Sustaining Scalability in Internet Growth*, pp. 60-82, IGI Global, 2014 (released in July 2013)

Y. Liu, X. Zhao, **L. Wang**, B. Zhang, "**Chapter 3: On the Aggregatability of Router Forwarding Tables**", In M. Boucadair, & D. Binet (Eds.), *Solutions for Sustaining Scalability in Internet Growth*, pp. 39-59, IGI Global, 2014 (released in July 2013)

K. Malasri, **L. Wang**, "**Securing Wireless Implantable Healthcare Devices**," book chapter, *2011 McGraw-Hill Yearbook of Science & Technology*, pp. 296-298, 2011

S. Kumar, **L. Wang**, "Ad Hoc and Sensor Networks," book chapter, *Encyclopedia of Computer Science and Engineering*, Wiley, pp. 24-32, Jan 2009

Refereed Journal Publications

V. Lehman, AKM Hoque, Y. Yu, B. Zhang, L. Zhang, **L. Wang**, A Secure Link State Routing Protocol for NDN, to appear in *IEEE Access Journal*

I. Voitalov, R. Aldecoa, **L. Wang**, D. Krioukov, Geohyperbolic Routing and Addressing Schemes, *ACM SIGCOMM Computer Communication Review*, vol. 47, issue 3, July 2017

Y. Liu, V. Lehman, **L. Wang**, **Efficient FIB Caching using Minimal Non-overlapping Prefixes**, *Computer Networks*, vol. 83, pp. 85-99, June 2015.

J. P. Abraham, Y. Liu, **L. Wang**, B. Zhang, "A Flexible Quagga-based Virtual Network with FIB Aggregation," *IEEE Network*, vol. 28, no. 5, pp. 47-53, Sept. 2014

L. Zhang, A. Afanasyev, J. Burke, V. Jacobson, kc Claffy, P. Crowley, C. Papadopoulos, **L. Wang**, B. Zhang, "Named Data Networking," *ACM SIGCOMM Computer Communication Review (CCR)*, vol. 44, no. 3, pp. 66-73, July 2014

C. Yi, A. Afanasyev, I. Moiseenko, **L. Wang**, B. Zhang, L. Zhang, "A Case for Stateful Forwarding Plane," *Elsevier Computer Communications, Special Issue on Information-Centric Networking*, vol. 36, no. 7, pp. 779-791, April 2013

M. Khan, E. McCracken, K. Islam, S. Bhurtel, **L. Wang**, R. Kozma, K. M. Iftekharuddin, "Autonomous Wireless Radar Sensor Mote for Target Material Classification," *Elsevier Digital Signal Processing*, vol. 23, no. 3, pp. 722-735, May 2013

Y. Liu, S. Amin, **L. Wang**, "Efficient FIB Caching using Minimal Non-overlapping Prefixes," *ACM SIGCOMM Computer Communication Review (CCR)*, vol. 43, no. 1, pp. 15-21, Jan. 2013.

R. Kozma, **L. Wang**, K. M. Iftekharuddin, E. McCracken, M. Khan, K. Islam, S. R Bhurtel, R. M. Demirel, "A Radar-Enabled Sensor System Integrating COTS Technology for Surveillance and Tracking", *Sensors*, vol. 12, no. 2, pp. 1336-1351, Jan. 2012

V. Khare, D. Jen, X. Zhao, Y. Liu, B. Zhang, D. Massey, **L. Wang**, L. Zhang, "Evolution towards Global Routing Scalability," *IEEE Journal on Selected Areas in Communications, Special Issue on Internet Routing Scalability*, vol. 28, no. 8, pp. 1363-1375, Oct. 2010 (ISI Journal Impact Factor: 4.249)

K. Malasri, **L. Wang**, "Design and Implementation of a Secure Wireless Mote-based Medical Sensor Network", *Sensors*, vol. 9, no. 8, pp. 6273-6297, August 2009 (ISI journal impact factor: 1.870)

K. Malasri, **L. Wang**, "Securing Wireless Implantable Devices for Healthcare: Ideas and Challenges", *IEEE Communications*, vol. 47, no. 7, pp. 74-80, July 2009 (ISI journal impact factor: 2.799)

L. Wang, D. Massey, L. Zhang, "Persistent Detection and Recovery of State Inconsistencies," *Computer Networks*, vol. 51, no. 6, pp. 1444-1458, April 2007 (ISI journal impact factor: 1.304)

L. Wang, Y. Xiao, "A Survey of Energy-Efficient Scheduling Mechanisms in Sensor Networks," *Springer Mobile Networks and Applications (MONET)*, vol. 11, no. 5, pp. 723-740, Oct. 2006 (ISI journal impact factor: 1.619)

L. Wang, X. Zhao, D. Pei, R. Bush, D. Massey, L. Zhang, "Protecting BGP Routes to Top Level DNS Servers," *IEEE Transactions on Parallel and Distributed Systems*, vol. 14, no. 9, pp. 851-860, Sept. 2003 (ISI journal impact factor: 1.916)

Refereed Conference Publications

K. Schneider¹, B. Zhang, **L. Wang**, L. Zhang, Near Loop-free Routing: Increasing Path Choices with Stateful Forwarding, in *Proceedings of ACM International Conference on Information-Centric Networking (ICN)*, Poster, Sept. 2017

M. Chowdhury, A. Gawande, **L. Wang**, Anonymous Authentication and Pseudonym-Renewal for VANET in NDN, in *Proceedings of ACM Conference on Information-Centric Networking (ICN)*, Demo, Sept. 2017

M. Chowdhury, A. Gawande, **L. Wang**, Secure Information Sharing among Autonomous Vehicles, in *Proceedings of ACM International Conference on Internet-of-Things Design and Implementation (IoTDI)*, April 2017

- M. Zhang, V. Lehman, **L. Wang**, **Scalable Name-based Data Synchronization for Named Data Networking**, in *Proceedings of IEEE INFOCOM 2017* (acceptance ratio: 20.93% = 292/1,395)
- V. Lehman, A. Gawande, R. Aldecoa, D. Krioukov, B. Zhang, L. Zhang, **L. Wang**, **An Experimental Investigation of Hyperbolic Routing with a Smart Forwarding Plane in NDN**, in *Proceedings of the IEEE IWQoS Symposium*, June 2016 (acceptance ratio: 20.6% = 27/131)
- J. Cao, D. Pei, Z. Wu, X. Zhang, B. Zhang, **L. Wang**, Y. Zhao, **Improving the Freshness of NDN Forwarding States**, in *Proceedings of IFIP Networking*, May 2016 (acceptance ratio: 29% = 58/200)
- L. Wang, Challenges in Designing a Network Service Model for Efficient Data Sharing, *DOE Network Challenge 2025 Workshop*, Feb. 2016
- A. Afanasyev, C. Yi, **L. Wang**, B. Zhang, and L. Zhang, **SNAMP: Secure Namespace Mapping to Scale NDN Forwarding**, in *Proceedings of the 18th IEEE Global Internet Symposium (GI 2015)*, pp. 281-286, April 2015
- C. Yi, J. Abraham, A. Afanasyev, **L. Wang**, B. Zhang, L. Zhang, **"On the Role of Routing in Named Data Networking"**, in *Proceedings of ACM Conference on Information Centric Networking*, pp. 27-36, Sept. 2014 (acceptance ratio: 18.3% = 17/93)
- AKM M. Hoque, S. O. Amin, A. Alyyan, B. Zhang, L. Zhang, **L. Wang**, **"NLSR: Named-data Link State Routing Protocol"**, in *Proceedings of ACM SIGCOMM Workshop on Information-Centric Networking (ICN)*, pp. 15-20, August 2013 (acceptance ratio: 20%)
- Y. Liu, B. Zhang, **L. Wang**, **"FIFA: Fast Incremental FIB Aggregation"**, in *Proceedings of IEEE INFOCOM*, pp. 1-9, April 2013 (acceptance ratio: 17.4% = 280/1613)
- K. M. Iftikharuddin, M. M. R. Khan, E. McCracken, **L. Wang**, and R. Kozma, **"Autonomous Wireless Radar Sensor Mote Integrating a Doppler Radar into a Sensor Mote and its Application in Surveillance and Target Material Classification"**, in *Proceedings of 56th SPIE Annual Meeting*, Vol. 8134, 15 pages, San Diego, CA, Aug. 2011.
- D. Massey, C. Papadopoulos, **L. Wang**, B. Zhang, L. Zhang, **"Teaching Network Architecture through Case Studies"**, *SIGCOMM 2011 Education workshop*, 5 pages, Aug. 2011
- Y. Liu, X. Zhao, **L. Wang**, B. Zhang, **"Incremental Forwarding Table Aggregation"**, in *Proceedings of IEEE GLOBECOM Next-Generation Networking (NGN) Symposium*, pp. 1-6, Dec. 2010
- R. Kozma, **L. Wang**, K. Iftikharuddin, E. McCracken, M. Khan, K. Islam, R. M. Demirer, **"A Multi-Modal Sensor System Integrating COTS Technology for Surveillance and Tracking"**, in *Proceedings of IEEE International Radar Conference*, pp. 1030-1035, May 2010
- X. Zhao, Y. Liu, **L. Wang**, B. Zhang, **"On the Aggregatability of Router Forwarding Tables"**, in *Proceedings of IEEE INFOCOM 2010*, pp. 1-9, Apr. 2010 (acceptance ratio 17.5% = 276/1575)
- L. Wang**, Q. Wu, Y. Liu, **"Design and Validation of PATRICIA for the Mitigation of Network Flooding Attacks"**, in *Proceedings of the IEEE/IFIP International Symposium on Trusted Computing and Communications*, pp. 651-658, August 2009
- D. Jen, M. Meisel, H. Yan, D. Massey, **L. Wang**, B. Zhang, L. Zhang, **"Towards A New Internet Routing Architecture: Arguments for Separating Edges from Transit Core"**, in *Proceedings of ACM HotNets (Hot Topics in Networks)*, pp. 103-108, Oct 2008 (acceptance ratio: **20% = 22/110**)
- K. Malasri, **L. Wang**, **"Design and Implementation of a Secure Wireless Mote-based Medical Sensor Network"**, in *Proceedings of the 10th International Conference on Ubiquitous Computing (UbiComp)*, pp. 172-181, Sept. 2008 (acceptance ratio: **18.6% = 42/226**)
- L. Wang**, Q. Wu, D. D. Luong, **"Engaging Edge Networks in Preventing and Mitigating Undesirable Network Traffic"**, in *Proceedings of 3rd Workshop on Secure Network Protocols (NPSEC) in conjunction with IEEE ICNP*, pp. 1-6, Oct. 2007
- D. Massey, **L. Wang**, B. Zhang, L. Zhang, **"A Scalable Routing System Design for Future Internet"**, in *Proceedings of ACM SIGCOMM (Special Interest Group on Data Communication) Workshop on IPv6 and the Future of the Internet*, 6 pages, August 2007 (acceptance ratio: **29.3%**)
- K. Malasri, **L. Wang**, **"Addressing Security in Medical Sensor Networks"**, in *Proceedings of ACM SIGMOBILE (Special Interest Group on Mobility of Systems, Users, Data, and Computing) HealthNet Workshop (in conjunction with ACM MobiSys)*, pp. 7-12, June 2007 (acceptance ratio: **26% = 13/50**)

- L. Wang, M. Saranu, J. Gottlieb, D. Pei, "**Understanding BGP Session Failures in a Large ISP**," in *Proceedings of IEEE INFOCOM*, pp. 348-356, May 2007 (acceptance ratio: **18% = 252/1400**)
- S. Balachandran, D. Dasgupta, L. Wang, "**A Hybrid Approach for Misbehavior Detection in Wireless Ad-Hoc Networks**," in *Proceedings of the 2nd Symposium on Information Assurance*, pp. 50-60, June 2006
- K. Malasri, L. Wang, "**SNAP: An Architecture for Secure Medical Sensor Networks**," in *IEEE SECON*, Poster, pp. 160-162, Reston, VA, Sept. 2006
- B. Zhang, V. Kambhampati, D. Massey, R. Oliveira, D. Pei, L. Wang, L. Zhang, "**A Secure and Scalable Internet Routing Architecture**," in *ACM SIGCOMM (Special Interest Group on Data Communication)*, Poster, 2 pages, Sept. 2006
- L. Wang, Y. Xiao, "**Energy Saving Mechanisms in Sensor Networks**," in *Proceedings of the IEEE International Conference on Broadband Networks (IEEE Broadnets)*, pp. 724-732, Oct. 2005
- J. R. Bradley and L. Wang, "**Understanding Malicious Worms' Impact on the Internet Infrastructure through Realistic Simulation**," in *USENIX NSDI (Networked System Design and Implementation)*, Poster, May 2005
- L. Wang, D. Massey, K. Patel and L. Zhang, "**FRTR: A Scalable Mechanism for Global Routing Table Consistency**," in *Proceedings of the International Conference on Dependable Systems & Network (DSN'04)*, pp. 465-474, June 2004 (acceptance ratio: **22% = 83/377**)
- S. T. Teoh, K. Ma, S. F. Wu, D. Massey, X. Zhao, D. Pei, L. Wang, L. Zhang, R. Bush, "**Visual-based Anomaly Detection for BGP Origin AS Change (OASC) Events**," in *Proceedings of the Distributed Systems, Operations, and Management Workshop (DSOM'03)*, pp. 155-168, Oct 2003 (acceptance ratio: **23.8% = 20/84**)
- D. Pei, L. Wang, D. Massey, S. F. Wu, L. Zhang, "**A Study of Packet Delivery Performance during Routing Convergence**," in *Proceedings of the International Conference on Dependable Systems & Networks (DSN'03)*, pp. 183-192, June 2003 (acceptance ratio: **30.8% = 45/146**)
- L. Wang, X. Zhao, D. Pei, R. Bush, D. Massey, A. Mankin, S. F. Wu, and L. Zhang, "**Protecting BGP Routes to Top Level DNS Servers**," in *Proceedings of the 23rd International Conference on Distributed Computing Systems (ICDCS'03)*, pp. 322-331, May 2003 (acceptance ratio: **17.7% = 72/406**)
- X. Zhao, M. Lad, D. Pei, L. Wang, D. Massey, S. F. Wu, L. Zhang, "**Understanding BGP Behavior Through A Study of DoD Prefixes**," in *Proceedings of DISCEX III*, pp. 214-225, April 2003 (acceptance ratio: 30%)
- L. Wang, X. Zhao, D. Pei, R. Bush, D. Massey, A. Mankin, S. F. Wu, L. Zhang, "**Observation and Analysis of BGP Behavior under Stress**," in *Proceedings of the Second ACM SIGCOMM (Special Interest Group on Data Communication) Internet Measurement Workshop (IMW'02)*, pp. 183-195, Nov. 2002 (full paper acceptance ratio: **24.2% = 15/62**)
- D. Pei, X. Zhao, L. Wang, D. Massey, A. Mankin, S. F. Wu, L. Zhang, "**Improving BGP Convergence Through Consistency Assertions**," in *Proceedings of IEEE INFOCOM 2002*, pp. 902-911, June 2002 (acceptance ratio: **20.5% = 192/938**)
- X. Zhao, D. Pei, L. Wang, D. Massey, A. Mankin, S. F. Wu, L. Zhang, "**Detection of Invalid Routing Announcements in the Internet**," in *Proceedings of the International Conference on Dependable Systems and Networks (DSN'02)*, pp. 59-68, June 2002 (acceptance ratio: **31% = 48/156**)
- X. Zhao, D. Pei, L. Wang, D. Massey, A. Mankin, S. F. Wu, L. Zhang, "**An Analysis of BGP Multiple Origin AS (MOAS) Conflicts**," in *Proceedings of the First ACM SIGCOMM (Special Interest Group on Data Communication) Internet Measurement Workshop (IMW'01)*, pp. 31-35, Nov. 2001 (acceptance ratio: **26.4% = 14/53**)
- A. Terzis, K. Nikoloudakis, L. Wang, L. Zhang, "**IRLSim: A General Purpose Packet Level Network Simulator**," in *Proceedings of 33rd Annual Simulation Symposium*, pp. 109-120, April 2000
- L. Wang, A. Terzis, L. Zhang, "**A New Proposal for RSVP Refreshes**," in *Proceedings of the 7th International Conference on Network Protocols (ICNP'99)*, pp. 163-172, Oct. 1999 (acceptance ratio **27.5% = 36/131**)
- A. Terzis, L. Wang, J. Ogawa, L. Zhang, "**A Two-Tier Resource Management Model for the Internet**," in *Proceedings of Global Internet 99*, pp. 1779-1791, Dec. 1999 (acceptance ratio **23.9% = 28/117**)
- M. Kazantzidis, L. Wang, M. Gerla, "**On Fairness and Efficiency of Adaptive Audio Application Layers for Multihop Wireless Networks**," in *Proceedings of IEEE MOMUC'99*, pp. 357-362, Nov. 1999

A. Terzis, J. Ogawa, S. Tsui, **L. Wang**, L. Zhang, "**A Prototype Implementation of the Two-Tier Architecture for Differentiated Services**," in *Proceedings of the 5th IEEE Real-Time Technology and Applications Symposium (RTAS'99)*, June 1999

M. Gerla, R. Bagrodia, L. Zhang, K. Tang, **L. Wang**, "**TCP over Wireless Multihop Protocols: Simulation and Experiments**," in *Proceedings of the IEEE International Conference on Communications (ICC'99)*, pp. 1089-1094, June 1999

A. Terzis, **L. Wang**, L. Zhang, "**A Scalable Resource Management Framework for Differentiated Services Internet**," in *Proceedings of the Third NASA/NREN Workshop on QoS for the Next Generation Internet*, August 1998

Non-Refereed Publications

V. Lehman, A. Gawande, R. Aldecoa, D. Krioukov, B. Zhang, L. Zhang, **L. Wang**, An Experimental Investigation of Hyperbolic Routing with a Smart Forwarding Plane in NDN, *NDN Technical Report NDN-0042*, July 2016

M. Zhang, V. Lehman, **L. Wang**, **PartialSync: Efficient Synchronization of a Partial Namespace in NDN**, *NDN Technical Report NDN-0039*, June 2016

Vince Lehman, A K M Mahmudul Hoque, Yingdi Yu, **Lan Wang**, Beichuan Zhang, and Lixia Zhang, **A Secure Link State Routing Protocol for NDN**, *NDN Technical Report NDN-0037*, Revision 1, January 26, 2016

A. Afanasyev, J. Shi, B. Zhang, L. Zhang, I. Moiseenko, Y. Yu, W. Shang, Y. Li, S. Mastorakis, Y. Huang, J. P. Abraham, S. DiBenedetto, C. Fan, C. Papadopoulos, D. Pesavento, G. Grassi, G. Pau, H. Zhang, T. Song, H. Yuan, H. B. Abraham, P. Crowley, S. O. Amin, V. Lehman, and **L. Wang**, **NFD Developer's Guide**, *NDN Technical Report NDN-0021*, Revision 5, October 27, 2015.

A. Afanasyev, R. Ravindran, G. Wang, **L. Wang**, B. Zhang, L. Zhang, **ICN Packet Format Design Requirements**, *Internet Draft (Work in Progress)*, March 29, 2015

A. Afanasyev, J. Shi, **L. Wang**, B. Zhang, and L. Zhang, **Packet Fragmentation in NDN: Why NDN Uses Hop-By-Hop Fragmentation (NDN Memo)**, *NDN Memo, NDN Technical Report NDN-0032*, Revision 1, March 21, 2015

Lixia Zhang, Alexander Afanasyev, Jeffrey Burke, Van Jacobson, kc claffy, Patrick Crowley, Christos Papadopoulos, **Lan Wang**, and Beichuan Zhang, **Named Data Networking**, *NDN Technical Report NDN-0019*, Revision 1, 10 April 2014.

Cheng Yi, Jerald Abraham, Alexander Afanasyev, **Lan Wang**, Beichuan Zhang, Lixia Zhang, **On the Role of Routing in Named Data Networking**, *NDN (Named Data Networking) Technical Report NDN-0016*, December 2013

Alexander Afanasyev, Cheng Yi, **Lan Wang**, Beichuan Zhang, and Lixia Zhang, **Scaling NDN Routing: Old Tale, New Design**, *NDN Technical Report NDN-0004*, Revision 1, July 18, 2013.

Cheng Yi, Alexander Afanasyev, Ilya Moiseenko, **Lan Wang**, Beichuan Zhang, and Lixia Zhang, **A Case for Stateful Forwarding Plane**, *NDN Technical Report NDN-0002*, July 2012.

Y. Liu, B. Zhang, L. Wang, "FIFA: Fast Incremental FIB Aggregation," University of Memphis Computer Science Department Technical Report No. CS-13-004, July 2013

L. Wang, AKM M. Hoque, C. Yi, A. Alyyan, B. Zhang, "**OSPFN: An OSPF Based Routing Protocol for Named Data Networking**," *NDN Technical Report NDN-0003*, July 2012

C. Yi, A. Afanasyev, I. Moiseenko, **L. Wang**, B. Zhang, L. Zhang, "**A Case for Stateful Forwarding Plane**," *NDN Technical Report NDN-0002*, July 2012.

A. Afanasyev, C. Yi, **L. Wang**, B. Zhang, L. Zhang, "**Adaptive Forwarding in Named Data Networking**," *ACM SIGCOMM Computer Communication Reviews (Editorial Note)*, vol. 42, no. 3, pp. 62-67, Jul. 2012

B. Zhang, **L. Wang**, X. Zhao, Y. Liu, L. Zhang, "**FIB Aggregation**," *Internet Draft*, draft-zhang-fibaggregation-02.txt, Oct. 2009

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L. Wang, Q. Wu, D. D. Luong, "**Engaging Edge Networks in Preventing and Mitigating Undesirable Network Traffic**," *U. Memphis Computer Science Dept Technical Report No. CS-07-004*, May 2007

D. Massey, **L. Wang**, B. Zhang, L. Zhang, "**A Proposal for Scalable Internet Routing & Addressing**," *Internet Draft*, <http://www.ietf.org/internet-drafts/draft-wang-ietf-efit-00.txt>, Feb. 2007

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L. Wang, Y. Xiao, "**Energy Saving Mechanisms in Sensor Networks**," *Technical Report No. CS-05-003, University of Memphis Computer Science Department*, May 2005

L. Wang, D. Massey, L. Zhang, "**Persistent Detection and Recovery of BGP Routing Inconsistencies**," *Technical Report No. CS-05-002, University of Memphis Computer Science Department*, Mar. 2005

L. Wang, D. Massey, K. Patel and L. Zhang, "**FRTR: A Scalable Mechanism to Restore Routing Table Consistency**," *UCLA CSD Technical Report 030054*, Jan. 2004

L. Wang, A. Terzis, L. Zhang, "**RSVP Refresh Overhead Reduction by State Compression**," *Internet Draft*, June 1999

Presentations - Conference (refereed *)

"Improving the Freshness of NDN Forwarding States," IFIP Networking, May 2016

"NLSR: Named-data Link State Routing Protocol," NDN Community Meeting, Sept. 2014

"NDN Project Progress," IEEE INFOCOM 2014 "Whether NDN" Panel, April 2014

"Design and Implementation of a Secure Wireless Mote-based Medical Sensor Network," UbiComp, Oct. 2008

"Engaging Edge Networks in Preventing and Mitigating Undesirable Network Traffic," 3rd Workshop on Secure Network Protocols (NPSEC), Oct. 2007

"Understanding BGP Session Failures in a Large ISP," IEEE INFOCOM, May 2007

"Hercules: An Environment for Large-Scale Enterprise Infrastructure Testing," Workshop on Advances and Innovations in Systems Testing, May 2007

"Observation and Analysis of BGP Behavior under Stress," at the second ACM SIGCOMM Internet Measurement Workshop, Nov. 2002

Presentations - Universities/Industry (refereed *)

"Architecture Development and Routing Design in Named Data Networking," Department of Computer and Information Science, University of Mississippi, Oct. 2015

"NDN Architectural Development and Routing Design," Colloquium of the Doctoral Program in Integrated Computing, Donaghey College of Information Science and Technology, University of Arkansas, Little Rock, Nov. 2014

"NDN Architectural Development and Routing Design," Chinese Academy of Sciences, Computer Network Information Center, June 2014

"Routing in NDN," NSF FIA PI meeting, November 14, 2013.

"Engaging Edge Networks in Preventing and Mitigating Undesirable Network Traffic," Computer Science Department Colloquium, University of Memphis, Nov. 2007

"Design and Implementation of SNAP (Sensor Network for Assessment of Patients)," Society of Women Engineers seminar, University of Memphis, Mar. 2007

"Exploring a Different Approach to Global Internet Routing, Scalability, Security, and Effectiveness", Computer Science Department Colloquium, University of Memphis, Dec. 2005

"Observation and Analysis of BGP Behavior under Stress," at the North American Network Operators' Group (NANOG) 26th Meeting, Oct. 2002

SUPPORT

(External)

ACTIVITY	AGENCY/SOURCE	AMOUNT	PERIOD
CRI-New: Collaborative: Building the Core NDN Infrastructure	NSF	\$2,500,000 (\$500,000 for U. Memphis)	9/1/2016 – 8/31/2019
FIA-NP: Collaborative Research: Named Data Networking Next Phase (NDN-NP) (PI)	NSF	\$582,000	5/1/2014-4/30/2018
Named Data Networking Supp I FY 14	NSF	\$36,141	9/1/2013-8/31/2014
Scaling NDN Routing through Name Mapping (PI)	Cisco Systems	\$99,985	2/2013-7/2014
REU Supplement: FIA Collaborative Research: Named Data Networking (NDN) (PI)	NSF	\$16,000	2012-2013
FIA: Collaborative Research: Name Based Networking (PI)	NSF	\$7,900,000 (\$449,942 for U. Memphis)	10/15/2010 - 10/15/2013
NeTS - FIND Collaborative Research: Enabling Future Internet innovations through Transit wire (eFIT) (PI)	NSF	\$1,004,200 total (\$246,355 for U. Memphis)	9/1/2007-8/31/2012
REU supplement to NSF CRI grant (PI)	NSF	\$16,000	5/25/2010-7/31/2011
REU supplement to NSF CRI grant (PI)	NSF	\$8,000	5/15/2009-7/31/2010
Collaborative Research: Building the Next-Generation Global Routing Monitoring System (PI)	NSF	\$575,000 total (\$149,946 for U. Memphis)	8/15/2006-7/31/2011
REU Supplement to NSF/CRI project (PI)	NSF	\$13,000	2/23/2007-7/31/2008

Internal Support

ACTIVITY	AGENCY/SOURCE	AMOUNT	PERIOD
Computer Science Small Equipment Grant	CAS Research Instrumentation Initiative	\$25,000	1/2017 - Present
Smart City Innovation Hub: Phase 1, Connected and Autonomous Vehicle Readiness Index	Research Investment Fund, U. Memphis	\$100,000 (Charles Santo, Sabyasachee (Sabya) Mishra, Eddie Jacobs, Mihalios Golias, Lan Wang, Carmen Astorne-Figari)	2017-2018
Robust and Anonymous Information Sharing among Autonomous Vehicle	FIT DRONES Cluster, U. Memphis	\$20,000	2/16/2017-6/30/2018
Protecting Data Security in Smart Internet-of-Things (IoT) Environments	FIT CAST Cluster, U. Memphis	\$10,000	1/1/2017-12/31/2017
Secure Information Sharing among Autonomous Vehicles	FIT DRONES Cluster, U. Memphis	\$12,000	1/2016-12/2016
Exploring a Data-Centric Approach to Securing Smart Homes	FIT CAST Cluster, U. Memphis	\$12,000	12/2015-8/2016

A Real-Time Demonstration System of FIB Aggregation (PI)	U. Memphis	\$23,000	2013
CLION: Center of Large-Scale Complex Systems & Integrated Optimization Networks (Founding Member)	U. Memphis	\$24,240 (2009-2010), \$32,476 (2010-2011)	2009 - 2011
Distributed Intelligence in Biologically-Motivated Multi-Agent Systems for Employment in Complex Warfare Scenarios (Research Member)	U. Memphis	\$100,000 total (\$13,000 for Lan Wang)	2008 - 2009
Preparing Students for an Embedded Everywhere World (Co-PI)	TAF/SIST	\$10,000	1/2007 - 1/2008
Network Infrastructure Testing Suite (PI)	Systems Testing Excellence Program	\$5,000	12/2006-5/2007
SNAP: Sensor Network for Assessment of Patients (PI)	Faculty Research Grant	\$6,500	5/2006-7/2007

OUTREACH

Project/s summary

PROJECT	PARTICIPANTS	PERIOD	SPONSORSHIP
Memphis 3.0 Planning Next Generation Connectivity Working Group	Working Group Members	2/2017 - Present	City of Memphis
Presenting department information at GenCyber summer camp	Summer Camp Participants	6/23/2016	Center for Information Assurance, University of Memphis
Presenting department information at Creative Video Game Design summer camp	Summer Camp Participants	6/6/2016	Department of Computer Science, University of Memphis
Judging internship projects, FedEx Summer Intern Director Review Board	FedEx Summer Interns and Supervisors	8/8/2016	FedEx
Speaker at 100 Girls of Code Workshop	Girls 10-18 Years Old	10/31/2015, 12/12/2015	Department of Computer Science, University of Memphis
Panelist at CS Education Day	High School Students	12/9/2010	Department of Computer Science, University of Memphis
Speaker at Computer Science Summer Camp for Girls	Middle School and High School Girls	Summer 2010, Summer 2014	Department of Computer Science, University of Memphis
Co-organizer of N2Women Meeting	ACM SIGCOMM female attendees	August 2008	ACM SIGMOBILE and Microsoft
Systems Testing Excellence Program (STEP)	16 faculty members in CS, MIS and ECE	Nov. 2006 - 2007	FedEx

SERVICE

UNIVERSITY	COMMITTEE/ACTIVITY	PERIOD
University	Intellectual Property Advisory Committee	Spring 2015 - Present
Department	Chair	2/2016 - Present
Department	Tenure and Promotion Committee	Fall 2010 - Present
Department	Faculty Mentoring (Scott Fleming)	Fall 2015 - Present
Department	Undergraduate Capstone Project Mentor	Spring 2016
Department	Associate Chair	8/2015 - 1/2015
Department	Faculty Search Committee (Chair)	Fall 2015
Department	Graduate Coordinator	Fall 2014 - Feb. 2016
College	Graduate Council	Fall 2014 - Feb. 2016
College	Tenure and Promotion Committee	Fall 2013 - Spring 2014
Department	Student Awards/Scholarship Committee	Fall 2013 - Spring 2014
University	Research Capacity Assessment Study Team Member	Spring 2013 - Summer 2013
Department	CS Social Coordinator	Fall 2012
Department	CS Research Day	Spring 2012
University	Judge for Annual Student Research Forum	2008
University	First-Year Mentor for Honor Students (Laurie Summers)	2007
University	Center for Information Assurance (CFIA) Advisory Committee	Fall 2008 - Present

Dept/University	University Winter Commencement	Dec. 2006
College	Department Chair Evaluation Committee	1/2007-2/2007
Department	Computer Science Colloquium Committee	Fall 2008 - Spring 2011, Fall 2013 - Spring 2014
Department	Scholarship Committee	Fall 2008 - Spring 2009
Department	GOALS committee (Self-Assessment)	Spring 2008 - Spring 2009, Fall 2010 - Spring 2014
Department	Postdoc Hiring Committee (Santosh Kumar is the chair)	2008, 2009, 2011
Department	Graduate Admissions Committee	Fall 2007 - Spring 2008, Fall 2010 - Summer 2011
Department	Undergraduate Curriculum Committee	Fall 2006 - 2007
Department	Visiting Associate Professor Search Committee	Spring 2006, Spring 2009
Department	Faculty Search Committee	Fall 2005 - Spring 2006, Fall 2008 - Spring 2014
Department	Advising Committee	Fall 2004 - Spring 2005
Department	Committee for Proposing a Model for UM/Fuzhou University BS Program in CS	Spring 2005
Department	Co-organizing Computer Networking Seminar	Spring 2005

OTHER

SOCIETY/ORGANIZATION/JOURNAL	COMMITTEE/EDITORIAL BOARD/OFFICE	PERIOD
PeerJ Computer Science Journal	Editorial Board	2015 - Present
KSII Transactions on Internet and Information Systems	Editorial Board	2013 - Present
ACM SIGCOMM	Travel Grant Co-Chair	2017
IEEE International Conference on Computer Communications (INFOCOM)	Technical Program Committee	2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018
IEEE LANMAN	Publicity Chair	2016
Multimedia Streaming in Information-/Content-Centric Networks (MuSIC) 2016	Technical Program Committee	2016
NDN (Named Data Networking) Community Meeting	Technical Program Committee	2015, 2017 [C]
IEEE MASS (International Conference on Mobile Ad hoc and Sensor Systems) Workshop on Content Centric Networks	Technical Program Committee	2015
ACM Conference on Information-Centric Networking (ICN)	Travel Grant Chair	2015, 2016
IEEE International Conference on Network Protocols (ICNP)	Publication Chair	2014
IEEE International Conference on Network Protocols (ICNP)	Technical Program Committee	2013
ACM Conference on Information-Centric Networking (ICN)	Technical Program Committee	2014
IFIP Networking	Technical Program Committee	2014
International Conference on Computer Communications and Networks - Network Architectures and Clean-Slate Designs Track (NACSD)	Technical Program Committee	2013
IEEE INFOCOM Workshop on Emerging Design Choices in Name-Oriented Networking (NOMEN)	Technical Program Committee	2012, 2013
ACM MobiHoc Workshop On Emerging Name-Oriented Mobile Networking Design (NOM)	Technical Program Committee	2012
ACM SIGCOMM Workshop on Information-Centric Networking (ICN)	Technical Program Committee	2011, 2012, 2013
IEEE International Conference on Communications (ICC) Next-Generation Networking and Internet (NGNI) Symposium	Technical Program Committee	2011
IEEE GLOBECOM Next Generation Networking Symposium	Technical Program Committee	2010, 2013
IEEE/IFIP International Symposium on Trusted Computing and Communications	Session Chair	2009
IEEE Workshop on Secure Network Protocols	Technical Program Committee	2009, 2010
International Conference on Networked Sensing Systems (INSS)	Technical Program Committee	2009, 2010
The 12th ACM International Conference on Modeling, Analysis, and Simulation of Wireless and Mobile Systems (MSWiM)	Technical Program Committee	2009
The Sixth International Conference on Broadband Communications,	Technical Program Committee	2009

Networks, and Systems (BROADNETS 2009), Wireless Track		
IEEE Workshop on Secure Network Protocols (NPSEC) 2008	Technical Program Committee [Co-Chair]	2008
IEEE Conference on Network Protocols (ICNP) 2008	Session Chair	2008
4th International Symposium on Innovations and Real-time Applications of Distributed Sensor Networks 2009	Technical Program Committee	2008
International Conference on Security and Cryptography (SECRYPT) 2008	Technical Program Committee	2008
IEEE Broadnets 2008, Wireless Communications, Networks and Systems Symposium	Technical Program Committee	2008
IEEE Conference on Network Protocols 2007	Session Chair	2007
IEEE Broadnets 2007, Wireless Communications, Networks and Systems Symposium	Technical Program Committee	2007
IEEE GLOBECOM 2006, Symposium on Internet Services and Enabling Technologies	Technical Program Committee	2006
IEEE GLOBECOM 2006, Symposium on Control and Management of High Performance Networks	Technical Program Committee	2006
International Symposium on Wireless LANs and PANs (Wireless Networking) in IWCMC 2006	Technical Program Committee	2006
International Symposium on Wireless Local and Personal Area Networks in WirelessCom 2005	Technical Program Committee	2005
International Conference on High Performance Computing and Communications	Technical Program Committee	2005
Journal of the Network and Systems Management	Reviewer	2010
IEEE Journal on Selected Areas in Communications	Reviewer	2009
ACM SIGMOBILE periodical, Mobile Computing and Communications Review (MC2R)	Reviewer	2009
GENI (Global Environment for Network Innovations) Proposal Review Panel	Reviewer	2009
IEEE Security & Privacy	Reviewer	2009
IEEE Transactions on Wireless Communications	Reviewer	2008
Journal of Communications and Networks	Reviewer	2007
IEEE GLOBECOM ASNS	Reviewer	2007
IFIP NETWORKING	Reviewer	2007
NSF Proposal Review Panel	Reviewer	2007, 2009, 2012, 2015, 2016
IFIP/TC6 NETWORKING 2007	Reviewer	2007
Journal of Computer Science and Technology	Reviewer	2006
IEEE Wireless Communications and Networking Conference 2007	Reviewer	2006
Handbook of Computer Networks	Reviewer	2006
International Conference on Distributed Computing Systems	Reviewer	2006
Journal of Wireless Communications and Mobile Computing	Reviewer	2005
IEEE Broadnets	Reviewer	2005
IEEE/ACM Transactions on Networking	Reviewer	2004, 2007, 2009, 2012, 2013, 2014, 2015, 2016
International Journal of Wireless and Mobile Computing	Reviewer	2004
IEEE International Conference on Communications	Reviewer	2004
Journal of Network and Computer Applications	Reviewer	2010
International Journal of Communication Systems	Reviewer	2010
Elsevier Computer Networks	Reviewer	2010, 2014
IEEE Transactions on Parallel and Distributed Systems	Reviewer	2003, 2010
IEEE Transactions on Mobile Computing	Reviewer	2011, 2015, 2016
ACM SIGCOMM Computer Communication Review (CCR)	Reviewer	2013
IEEE Communication Letters	Reviewer	2014
IEEE Transactions on Multimedia	Reviewer	2016
N2Women (Networking Networking Women) meeting at ACM SIGCOMM 2008	Organizer	2008
ACM Transactions on the Web	Reviewer	2016