Yanyong Zhang

Department of Electrical and Computer Engineering
Wireless Information Network Laboratory (WINLAB)
Rutgers, The State University of New Jersey
671 Rt. 1 South, North Brunswick, NJ 08902
Email1: yyzhang@ece.rutgers.edu
Email2: yyzhang@winlab.rutgers.edu
Phone: +1 848 932 0911
URL: http://www.ece.rutgers.edu/~yyzhang

Research Interests

Sensor Networks, Mobile Computing, Distributed Computing, Future Internet Architecture

Education

8/97 – 8/02	**The Pennsylvania State University**, University Park, PA Department of Computer Science & Engineering Ph.D., Computer Science and Engineering
8/92 – 5/97	**University of Science & Technology of China**, Anhui, P.R.China Department of Computer Science & Technology B.S., Computer Science

Professional Experience

- *Associate Professor*, Rutgers University, Department of Electrical & Computer Engineering, WINLAB, July 2008 – present.
- *Assistant Professor*, Rutgers University, Department of Electrical & Computer Engineering, WINLAB, July 2002 – June 2008.
- *Research Assistant*, Penn State University, Department of Computer Science & Engineering, August 1997 – August 2002.
- *Summer Intern,* IBM T. J. Watson Research Center, 1999, 2000.

Citations (Google Scholar As of 7/19/2014)

- Total citations: 4339
- H-index: 31

Supervised Students

Ph.D. Dissertations Completed Before Tenure

1. Jaewon Kang (co-advised with Badri Nath), dissertation title "Congestion Control in Wireless Sensor Networks," graduated in fall 2006, currently employed at Telcordia as a Senior Research Scientist.
2. Wenyuan Xu (co-advised with Wade Trappe), dissertation title "Defending Wireless Networks from Radio Interference Attacks," graduated in summer 2007, currently employed at University of South Carolina as an Assistant Professor.
3. Pandurang Kamat (co-advised with Wade Trappe), "Providing Privacy in Sensor Networks," graduated in fall 2007, currently employed at Ask.com.
4. Yinglung Liang, "Failure Analysis, Modeling, and Prediction for IBM BlueGene/L," graduated in fall 2007, currently employed at Ask.com.

Ph.D. Dissertations Completed After Tenure
5. Lijun Dong, "Content Caching, Retrieval and Dissemination in Networks with Storage", graduated in May 2011, current employed at Interdigital.
6. Gautam Bhanage, "Network Virtualization on the Wireless Edge", graduated in May 2011, current employed at Juniper.
7. Shengchao Yu, "Robust Sentry-Based Schemes: Towards Long-Lived, Fault-Tolerant Wireless Sensor Networks," graduated in December 2011, currently employed at FlexTrade Systems.
8. Bernhard Firner, "Transmit Only for Dense Wireless Networks," graduated in May 2014, currently employed in Rutgers ECE as a teaching professor while working on his start up OwlPlatform.
9. Tingting Sun, "Enhancing Network Functionalities for Emerging Mobile Networks through Learning," graduated in May 2014, currently employed at Bloomberg.
10. Chenren Xu, "Learning Human Contexts through Unobtrusive Methods," defended his thesis in May 2014, going to join CMU as a postdoc fellow.

Ph.D. Dissertations Currently Under Supervision
1. Feixiong Zhang (4th year), working on "Smooth Mobile Content Delivery in Future Internet."
2. Sugang Li (2nd year), working on "Building Internet of Things on Information Centric Networks".
3. Musaab Ali (1st year), working on "Low Cost Accurate Bed-Embedded Weight Sensor."

Research Grants
External Grants after Tenure

1. "Collaborative Research: A multi-layer approach towards reliable cognitive radio networks," W. Trappe and Y. Zhang, *National Science Foundation*, $285K, 2014-2017, co-PI. (recommended)(50% contribution)
2. "NeTS: Small: Transmit Only: Cloud Enabled Green Communication for Dense Wireless Systems," Y. Zhang and N. Mandayam, *National Science Foundation*, $498K, 2014-2017, principal investigator. (recommendated)
3. "Building the computing backend for in-depth analysis of wireless and network data," Y. Zhang and W. Trappe, *Army Research Office*, $128K, 2014-2015, principal investigator.
4. "NeTS: JUNO: Virtual Mobile Cloud Network for Realizing Scalable, Real-Time Cyber Physical Systems," D. Raychaudhuri, I. Seskar and Y. Zhang, *National Science Foundation*, $300K, 2014-2017, co-PI. (30% contribution)
5. "FIA-NP: Collaborative Research: The Next-Phase MobilityFirst Project - From Architecture and Protocol Design to Advanced Services and Trial Deployments," D. Raychaudhuri, Y. Zhang, W. Trappe, R. Martin and R. Yate, *National Science Foundation*, $2.2M, 2014-2016, co-PI. (20% contribution)
6. "MobilityFirst - A Robust and Trustworthy Mobility Centric Architecture for the Future," D. Raychaudhuri, W. Trappe, M. Gruteser, R. Yates, R. Martin, I. Seskar and Y. Zhang, *National Science Foundation*, $2.7M, 2010-2013, co-PI. (15% contribution).
7. "TC:Large: Collaborative Research: AUSTIN-- An Initiative to Assure Software Radios have Trusted Interactions," W. Trappe, Y. Zhang, R. Wright and N. Minsky, *National Science Foundation*, $410K, 09/09-08/12, co-PI. (25% contribution)
8. "CT - ISG: ROME: Robust Measurement in Sensor Networks," Y. Zhang, H. Xiong and D. Yao, *National Science Foundation*, $400K, 09/08-08/11, principal investigator.

External Grants before Tenure

9. "Collaborative Research: CT-T: TRIESTE: A Trusted Radio Infrastructure for Enforcing Spectrum Etiquettes," W. Trappe, Y. Zhang and C. Rose, *National Science Foundation*, $50K, 09/07-08/08, co-principal investigator. (30% contribution).
10. "A Roll-Call System for Asset Tracking," W. Trappe and Y. Zhang, *National Science Foundation (STTR)*, $75K, 2006-2007, co-principal investigator. (50% contribution).
11. "Collaborative Research: CSR-SMA+AES: Pro-active Runtime Health Enhancement of Large-scale Parallel Systems Using PROGNOSIS," Y. Zhang, *National Science Foundation,* $326,433, 09/06 – 08/09, principal investigator at Rutgers University.
12. "CAREER:PROSE: Providing Robustness in Systems of Embedded Sensors," Y. Zhang,, *National Science Foundation*, $484,866.00, 07/06 – 06/11, principal investigator.
13. "Collaborative Research: CSR---SMA+AES: PROGNOSIS to Enhance the Runtime Health of Large Scale Parallel Systems," Y. Zhang. *National Science Foundation*, $79,999, 08/05 – 07/06, principal investigator at Rutgers University.
14. "NeTS-NOSS: PARIS: A Framework for Privacy Augmented Relaying of Information from Sensors," W. Trappe and Y. Zhang, *National Science Foundation*, $500K, 09/04 – 09/07, co-principal inestigator. (50% contribution).
15. "ORBIT: Open-Access Research Testbed for Next-Generation Wireless Networks," D. Raychaudhuri, R.Yates, W. Trappe, M. Parashar, Y. Zhang, H. Kobayashi (Princeton), H. Schulzrinne (Columbia), S. Paul (Bell labs), K. Ramaswamy (Thomson R&D), A. Acharya (IBM Research), *National Science Foundation*, $5.4M, 09/03 – 09/07, co-principal investigator (10% Rutgers Effort, 8% Total Effort).

Internal Grants

1. "Traffic Accident Prevention Through Distributed Automotive Sensing and Control Systems," Marco Gruteser, Kaan Ozbay, Wade Trappe, Yanyong Zhang, *Rutgers Academic Excellence Fund*, $50K, 2006-2007. (20% contribution).
2. "Institute for Computer and Information Security (ICIS)", H. Hirsh et al., *Rutgers Academic Excellence Fund*, $180K, 2005-2006, (Participating Investigator). (10% Contribution)

Professional Activities

Journal Editorial
- Associate Editor for IEEE TMC (2012-), IEEE TSC (2012-)
- Guest Editor for the Journal of Computer Science on the special issue on "Reliability and Autonomic Management", 2005

Conference/Workshop Organization
- Financial Chair for ACM/IEEE CPSWeek 2015
- Track co-chair at ALGOSENSORS 2014
- Program co-chair for the 6th ACM HotPlanet Workshop
- General co-chair for the First International Workshop on Mobile Sensing, Computing and Communication (co-located with Mobihoc 2014)
- Vice Program Chair and Track Chair at 2013 IEEE International Conference on internet of Things (iThings2013)
- Scholarship Chair for the 2013 ACM International Conference on Computing Frontiers
- Vice-Chair for the Networking and Distributed Systems Track at the 24th International Symposium on Computer Architecture and High Performance Computing, 2012
- Organizer of the First Workshop on Internet of Things Applications (IoT App), 2012
- Networks & Future Internet Symposium Chair for WoCC 2011
- Publication Chair of the International Conference on Parallel Processing (ICPP), 2008.
- Organizer of the First Workshop on the Security and Privacy of Emerging Ubiquitous Communication Systems (SPEUCS), 2007

- Chair of the track "Parallel and Distributed Computing" at the 16th International Conference on Computer Communications and Networks (ICCCN), 2007
- Organizer of the Workshops on System Management Techniques, Processes, and Services, 2005, 2006, 2007, 2008, 2009, 2010,2011
- Local Chair of the 2006 GLSVLSI, Philadelphia, PA.
- Organizer of Workshop on Self-Healing, Adaptive and Self-MANaged Systems (SHAMAN), 2002

Technical Program Committees
- Program committee member for 2014 Infocom, IPSN, ICDCN, NOM workshop, ICPP
- Program committee member for 2013 Infocom, ICDCS, ICPP, ANCS, ICCCN, CosDEO
- Program committee member for 2012 ICDCS, PhoneCom
- Program committee member for 2011 ICC, ICDCS, PhoneCom, MSN
- Program committee member for 2010 Computing Frontiers, IEEE MASS, IEEE Cluster, IEEE SRDS
- Program committee member for 2009 IEEE Symposium on Reliable Distributed Systems, Sarnoff, ICDCS, WiSec
- Program committee member for 2008 WiSec, DSN, Infocom,
- Program committee member for 2007 Infocom, HiPC, DSN
- Program committee member for the first MLDM workshop, 2006
- Program committee member for the 2006 International Conference on Parallel and Distributed Systems (ICPADS), 2006
- Program committee member for the Third ACM Workshop on Security of Ad Hoc and Sensor Networks (SASN), 2005
- Program committee member for the International Conference on Parallel Processing (ICPP), 2005
- Program committee member for the First International Workshop on Reliability and Autonomic Management in Parallel and Distributed Systems (RAMPDS), 2005
- Program Committee Member for the WICON 2005 Workshop on "Information Fusion and Dissemination in Wireless Sensor Networks", 2005
- Program Committee Member for the IASTED International Conference on Parallel and Distributed Computing and Networks (PDCN), 2004, 2005
- Program Committee Member for the First Workshop on Algorithms and Architecture For Self Managing Systems, 2003
- Program Committee Member for the 10th International Conference on High Performance Computing, 2003

Proposal Reviewing
- Panelist/Reviewer, National Science Foundation of the United States
- Reviewer of United States-Israel Binational Science Foundation

Journal Reviewing (list incomplete)
- Reviewer for ACM Transactions on Sensor Networks
- Reviewer for IEEE Transactions on Computers
- Reviewer for IEEE Transactions on Parallel and Distributed Systems
- Reviewer for IEEE Transactions on Mobile Computing
- Reviewer for IEEE Pervasive Computing Magazine
- Reviewer for IEEE Systems, Man and Cybernetics

Society Membership
- Member of ACM and IEEE

Invited Talks

1. "Learning Human Contexts through Unobtrusive Methods," University of Michigan, Ann Arbor, MI, July 2014.

2. "Learning Human Contexts through Unobtrusive Methods," Zhejiang University, Hangzhou, China, June 2014.
3. "Learning Human Contexts through Unobtrusive Methods," Shanghai Jiaotong University, Shanghai, China, June 2014.
4. "Learning Human Contexts through Unobtrusive Methods," Rochester Institute of Technology, Rochester, NY, March 2014.
5. "SCPL+Crowd++ -- Two Unobtrusive techniques to Learn Human Contexts," NYU Poly, Brooklyn, NY, January 2014.
6. "The Case for Transmit-Only Communication," Penn State University, University Park, PA, December 2013.
7. "The Case for Transmit-Only Communication," Microsoft Research Asia, Beijing, China, Aug 2013.
8. "MobilityFirst: A Mobility Centric Architecture for the Future Internet," Asia Future Internet summer school, August 2013.
9. "The Case for Transmit-Only Communication," Hong Kong Polytechnic University, Hong Kong, China, July 2013.
10. "The Case for Transmit-Only Communication," Tshinghua University, Beijing, China, June 2013.
11. "Keynote: Global Name Resolution Service in MobilityFirst Future Internet Architecture," at the 8th International Conference on Future Internet Technologies (CFI), Beijing, China.
12. "Radio Frequency Based Device-Free Passive Localization," at Gerontechnology Workshop, Hefei Institute of Technology, Hefei, China, October 2012.
13. "Content Discovery and Delivery in MobilityFirst Network," the 2nd Huawei Multimedia Workshop, May 2012.
14. "MobilityFirst: A Mobility Centric Architecture for the Future Internet," Interdigital, April 2011.
15. "Geoboard: Tying Information to a Geographic Location through Intermittent Wireless Networks," Nokia Research Beijing, March 2010.
16. "Efficient Content Dissemination in a Cache-and-Forward Network," Thomson, July 2008.
17. "PROSE: Providing Robustness in Systems of Embedded Sensors," Princeton, Sept 2007.
18. "R-Sentry: Providing Continuous Sensor Services against Random Node Failures," at *the 2007 Wireless & Optical Communications Conference*, Newark, NJ, April 2007.
19. "Large-scale System Failure Analysis and Prediction Models: Our Experience with BlueGene/L," *IBM T. J. Watson Research Center, IBM Almaden Research Center,* 2006.
20. "PARIS: A Framework for Privacy Augmented Relaying of Information from Sensors," at *Special workshop on WSN security and privacy,* Carnegie Mellon University, 2005.
21. "PARIS: A Framework for Privacy Augmented Relaying of Information from Sensors," *IBM T. J. Watson Research Center,* 2005.
22. "The feasibility of Launching and Detecting Jamming Attacks in Wireless Networks", at *Network/Computer Security Workshop*, Bethlehem, PA, May 2005.
23. "Future Wireless Technologies: Pervasive Computing," *ITE CONFERENCE*, Trenton, NJ, July 2004.
24. "PARIS: Privacy Augmented Relaying of Information from Sensors," *Secure Mobility Forum*, Atlantic City, NJ, September 2004.

Honors/Awards
- Best Poster Award, "Improving RF-Based Device-Free Passive Localization In Cluttered Indoor Environments Through Probabilistic Classification Methods" ACM Sensys 2011
- Fourth Annual Alexander Schwarzkopf Prize for Technological Innovation from the Industry/University Cooperative Research Center (I/UCRC) Association, 2008
- Nominee of the 2006-2007 Excellence in Teaching Award for Electrical and Computer Engineering Department
- NSF CAREER Award
- Best Graduate Research Assistant award in the CSE department at Penn State for outstanding research, 2001 (1 awarded per year)
- IBM research fellowship, 2001-2002 (27 recipients nationwide out of more than 250 applicants)

- Dean's fellowship, College of Engineering, Penn State, 1997-2000 (3 awarded per year)

Books
- Y. Liang, Y. Zhang, M. Jette, H. Xiong, A. Sivasubramaniam, R. Sahoo, "Failure Analysis, Modeling, and Prediction for a Large-Scale System," in X. Yao, X. Li, and D. Tao editors, Computational Intelligence and Its Applications, ISBN: 978-7-312-02218-0, University of Science and Technology of China Press.
- Y. Chen, W. Xu, W. Trappe, Y. Zhang, "Securing Emerging Wireless Systems, Lower-Layer Approaches," ISBN 978-0-387-88490-5, Springer.

Refereed Journal Publications
Under Review
1. T. Sun, Y. Zhang, W. Trappe, "Improving Access Point Association Protocols Through Channel Utilization and Adaptive Probing," IEEE Transactions on Mobile Computing. Second Round.

In Press
1. C. Xu, S. Li, Y. Zhang, E. Miluzzo, Y. Chen, "Crowdsensing the Speaker Count in the Wild: Implications and Applications," IEEE Communication Magazine, Special Issue on Mobile Crowd Sensing. In press.

Published After Tenure
1. T. Sun, B. Zan, Y. Zhang, M. Gruteser, "The Boomerang Protocol: Tieing Data to Geographic Locations in Vehicular Ad Hoc Networks," IEEE Transactions on Mobile Computing, July 2012.
2. S. Zhou, Y. He, Y. Zhang, and R. Yuan, "Towards High-Performance Dedicated Control Channel in Multi-Radio Multi-Channel Networks," Journal of Convergence Information Technology, 6(2), pp. 7-18, 2011.
3. P. Kamat, W. Xu, W. Trappe, Y. Zhang, "Temporal Privacy in Wireless Sensor Networks: Theory and Practice," ACM Transactions on Sensor Networks, 5(4), Nov 2009.

Published Before Tenure
4. W. Xu, W. Trappe, Y. Zhang, "Defending Wireless Sensor Networks from Radio Interference through Channel Adaptation," ACM Transactions on Sensor networks, 4(4), pp. Aug 2008.
5. J. Kang, Y. Zhang, B. Nath, "An Optimal Resource Control Scheme under Fidelity and Energy Constraints in Sensor Networks," Wireless Networks Journal (WINET), 15(4), May 2009.
6. K. Ma, Y. Zhang, W. Trappe, "Managing Mobile Sensor Networks Using Network Dynamics," IEEE Transactions on Parallel and Distributed Systems, 19(1), pp.106-120, January 2008.
7. J. kang, Y. Zhang, B. Nath, "TARA: Topology-Aware Resource Adaptation to Alleviate Congestion in Sensor Networks," IEEE Transactions on Parallel and Distributed Systems, vol. 18, pp. 919-931, July 2007.
8. W. Xu, K. Ma, W. Trappe, Y. Zhang, "Jamming Sensor Networks: Attack and Defense Strategies," IEEE Networks Special Issue on Sensor Networks, vol. 20, pp. 41-47, May 2006.
9. Y. Zhang, A. Sivasubramaniam, "ClusterSchedSim: A Unifying Simulation Framework for Cluster Scheduling," Journal of Simulation: Transactions of the Society for Modeling and Simulation International, Special Issue on Modeling and Simulation Applications in Cluster and Grid Computing, 80(4-5), pp. 191-206. May 2004.
10. Y. Zhang, H. Franke, J. Moreira, A. Sivasubramaniam, "An Integrated Approach to Parallel Scheduling Using Gang-Scheduling, Backfilling and Migration," IEEE Transactions on Parallel and Distributed Systems, 14(3), pp. 236-247, March 2003.
11. M. Squillante, Y. Zhang, A. Sivasubramaniam, N. Gautam, H. Franke, J. Moreira, "Modeling and Analysis of Dynamic Co-scheduling in Parallel and Distributed Environments," Special Issue of Performance Evaluation Review, 30(1), pp. 43-54. [Also as Proceedings of the ACM SIGMETRICS 2002 Conference on Measurement and Modeling of Computer Systems (Sigmetrics'2002), pp. 43-54, June 2002].

12. Y. Zhang, A. Sivasubramaniam, J. Moreira, H. Franke, "Impact of Workload and System Parameters on Next Generation Cluster Scheduling Mechanisms," IEEE Transactions on Parallel and Distributed Systems, 12(9), pp. 967-985, September 2001.

Refereed Conference Publications

1. C. Xu, V. Srinivasan, J. Yang, Y. Hirase, E. M. Tapia, Y. Zhang, "Context-aware Global Power Management for Mobile Devices Balancing Battery Outage and User Experience," in Proceedings of the 11th IEEE International Conference on Mobile Ad hoc and Sensor Systems (MASS), October 2014. To appear.
2. S. Li, Y. Zhang, D. Raychaudhuri, R. Ravindran, "A Comparative Study of MobilityFirst and NDN based ICN-IoT Architectures," in Proceedings of the QSHINE workshop, August 2014. To appear.
3. F. Zhang, Y. Zhang, A. Reznik, H. Liu, C. Qian, C. Xu, "A Transport Protocol for Content-Centric Networking with Explicit Congestion Control," in Proceedings of the 23rd IEEE International Conference on Computer Communications and Networks (ICCCN), August 2014. To appear.
4. F. Zhang, A. Reznik, H. Liu, C. Xu, Y. Zhang, I. Seskar, "Using ORBIT for evaluating wireless content-centric network transport," in Proceedings of the 8th ACM international workshop on Wireless network testbeds, experimental evaluation & characterization, 2013.
5. C. Xu, S. Li, G. Liu, Y. Zhang, E. Miluzzo, Y. Chen, J. Li, and B. Firner. "Crowd++: unsupervised speaker count with smartphones," in Proceedings of the 2013 ACM international joint conference on Pervasive and ubiquitous computing, pp. 43-52, September 2013.
6. R. Moore, B. Firner, C. Xu, R. Howard, Y. Zhang, and R. Martin, "Building a Practical Sensing System," in Proceedings of 2013 IEEE and Internet of Things (iThings), pp. 693-698, August 2013.
7. J. Li, Y. Zhang, Y. Chen, K. Nagaraja, S. Li, and D. Raychaudhuri, "A Mobile Phone Based WSN Infrastructure for IoT over Future Internet Architecture," in Proceedings of 2013 IEEE and Internet of Things (iThings), pp. 426-433, August 2013.
8. X. Liu, W. Trappe and Y. Zhang, "Secure Name Resolution for Identifier-to-Locator Mappings in the Global Internet," in Proceedings of the International Conference on Computer Communications and Networks (ICCCN), 2013.
9. R. Moore, B. Firner, C. Xu, R. Howard, R. P. Martin, and Y. Zhang. "It's Tea Time: Do You Know Where Your Mug Is?," in Proceedings of the 5th ACM Workshop on HotPlanet, August 2013.
10. C. Xu, B. Firner, R. S. Moore, Y. Zhang, W. Trappe, R. Howard and N. An, "SCPL: Indoor Device-Free Multi-Subject Counting and Localization Using Radio Signal Strength," in Proceedings of the 12th ACM/IEEE Conference on Information Processing in Sensor Networks (IPSN), April 2013. (Acceptance Ratio: 20.9%)
11. J. Li, H. Wu, B. Liu, J. Lu, Y. Wang, X. Wang, Y. Zhang, and L. Dong, "Popularity-driven Coordinated Caching in Named Data Networking," in Proceedings of the 2012 ACM/IEEE Symposium on Architectures for Networking and Communications Systems, Oct 2012.
12. T. Vu, A. Baid, Y. Zhang, T. Nguyen, J. Fukuyama, R. Martin and D. Raychaudhuri, "DMap: A Shared Hosting Scheme for Dynamic Identifier to Locator Mappings in the Global Internet," in Proceedings of the 32nd International Conference on Distributed Computing Systems, June 2012. (Acceptance Rate: 13% -- 71 out of 515)
13. C. Xu, B. Firner, Y. Zhang, R. Howard and J. Li, "Improving RF-Based Device-Free Passive Localization In Cluttered Indoor Environments Through Probabilistic Classification Methods," in Proceedings of the 11th ACM/IEEE Conference on Information Processing in Sensor Networks (IPSN), April 2012. (Acceptance Rate: 14.9%)
14. C. Xu, B. Firner, Y. Zhang, R. Howard and J. Li, "Trajectory-Based Indoor Device-Free Passive Tracking," in Proceedings of the 2nd International Workshop on Mobile Sensing, in conjunction with IPSN, April 2012.

15. T. Sun, Y. Zhang, and W. Trappe, "Improving Access Point Association Protocols Through Channel Utilization and Adaptive Probing," in the proceedings of IEEE MASS, poster, 2011.

16. B. Zan, T. Sun, M. Gruteser, F. Hu, and Y. Zhang, "A Privacy Preserving System for Friend Locator Applications," in Proceedings of the 9th ACM International Symposium on Mobility Management and Wireless Access, Oct 2011.

17. G. Bhanage, Y. Zhang, and D. Raychaudhuri, "Virtual Wireless Network Mapping: An Approach to Housing MVNOs on Wireless Meshes," in Proceedings of IEEE International Conference on Personal, Indoor and Mobile Radio Communications (PIMRC), Sep 2011.

18. L. Dong, D. Zhang, Y. Zhang and D. Raychaudhuri, "Optimal Caching with Content Broadcast in Cache-and-Forward Networks", in Proceedings of the IEEE International Conference on Communications (ICC), 2011.

19. L. Dong, Y. Zhang and D. Raychaudhuri, "Performance Evaluation of Content Based Routing with In-Network Caching", in Proceedings of the IEEE Wireless & Optical Communications Conference (WOCC), 2011.

20. L. Dong, Y. Zhang and D. Raychaudhuri, "Enhance Content Broadcast Efficiency in Routers with Integrated Caching", in Proceedings of the IEEE Symposium on Computers and Communications (ISCC), 2011.

21. B. Firner, C. Xu, R. Howard, Y. Zhang, "Multiple Receiver Strategies for Minimizing Packet Loss in Dense Sensor Networks", in Proceedings of the 11th ACM Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc), pp 211-220, September 20-24, 2010.

22. K. Konstantinos, B. Firner, R. Howard, Y. Zhang, R. Martin, "Detecting Intra-Room Mobility with Signal Strength Descriptors", in Proceedings of the 11th ACM Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc), September 20-24, 2010.

23. B. Zan, T. Sun, M. Gruteser, Y. Zhang, "The Boomerang Protocol: Tieing Data to Geographic Locations in Mobile Disconnected Networks," in Proceedings of the Eleventh International Conference on Mobile Data Management, May 2010.

24. Gautam Bhanage, Ivan Seskar, Yanyong Zhang, Dipankar Raychaudhuri, and Shweta Jain, "Experimental Evaluation Of OpenVZ From A Testbed Deployment Perspective," in proceedings of the 6th international conference of Testbeds and Research Infrastructure (ICST Tridentcom), Berlin, May, 2010.

25. B. Zan, T. Sun, M. Gruteser, Y. Zhang, "ROME: Road Monitoring and Alert System through Geocache," in Proceedings of the Fourth International Workshop on System Management Techniques, Processes, and Services (SMTPS), April 2010.

26. G. Bhanage, R. Mahindra, I. Seskar, D. Raychaudhuri, and Y. Zhang, "Testbed Design For Facilitating SimultaneousWiMAX Experiments", extended abstract in the ACM wireless security symposium (WiSEC), Hoboken, NJ, March, 2010.

27. L. Dong, Y. Zhang, Y. Zhang, and D. Raychaudhuri, "Optimized content caching and request capture in cnf networks," in Proceedings of the fifth international wireless Internet conference (WICON), 2010.

28. L. Dong, Y. Zhang, and D. Raychaudhuri, "Gateway controlled content caching and retrieval for cache-and-forward networks," in the Proceedings of Globecom Workshop EFSOI, 2009.

29. L. Dong, H. Liu, Y. Zhang, S. Paul and D. Raychaudhuri, "On the Cache-and-Forward Network Architecture," in Proceedings of the IEEE International Conference on Communications (ICC), 2009.

30. B. Firner, P. Jadhav, Y. Zhang, R. Howard, W. Trappe, E. Fenson, "Towards Continuous Asset Tracking: Low-Power Communication and Fail-Safe Presence Assurance," in Proceedings of the 6th Annual IEEE Communications Society Conference on Sensor, Mesh and Ad Hoc Communications and Networks (SECON), 2009.

31. B. Firner, P. Jadhav, Y. Zhang, R. Howard, W. Trappe, "Towards Continuous Tracking: Low-power Communication and Fail-Safe Presence Assurance," in Proceedings of the International Conference on Information Processing in Sensor Networks (IPSN), pp.417-418, 2009.

32. G. Bhanage, Y. Zhang, "Software Architecture for Scalable Multi-Hop Mobility Emulation with Indoor Wireless Grids," in the proceedings of the Third IEEE International Workshop on

Wireless Mesh and Ad Hoc Networks (WIMAN), collocated with IEEE ICDCS, Montreal, Canada, June 2009.

33. H. Liu, D. Raychaudhuri and Y. Zhang, "Performance Evaluation of the Cache-and-Forward (CNF) Network for Mobile Content Delivery Services," in Proceedings of the IEEE workshop on Future-Networks, 2009.

34. Jiawei Sun, Bernhard Firner, Danfeng Yao, and Yanyong Zhang. "Efficient and Fault-Tolerant Detection of Attacks in RFID Asset Tracking Systems," in Proceedings of Wireless and Optical Communications Conference (WOCC). Newark, NJ. May 2009.

35. G. Bhanage, Y. Zhang, I. Seskar, "On the topology creation for an indoor wireless grid," in the proceedings of ACM Mobicom workshop on wireless network testbed evaluation and characterization, San Francisco, September 2008.

36. Gautam Bhanage, Yanyong Zhang, Ivan Seskar, "On topology creation for an indoor wireless grid," in Proceedings of WINTECH, pp. 81-88, 2008.

37. B. Firner, S. Medhekar, Y. Zhang, R. Howard, W. Trappe, P. Wolniansky and E. Fenson, "PIP Tags: Hardware Design and Power Optimization," in Proceedings of HotEmNets, 2008.

38. W. Xu, W. Trappe, Y. Zhang, "Anti-Jamming Timing Channels for Wireless Networks," in Proceedings of the 1st ACM Conference on Wireless Security (WiSec), 2008. (Acceptance Rate: 16.7%)

39. R. Mahindra, G. D. Bhanage, G. Hadjichristofi, I. Seskar, D. Raychaudhuri, Y. Zhang, "Space Versus Time Separation ForWireless Virtualization On An Indoor Grid," in Proceedings of the 2008 Next Generation Internet Networks (NGI), April 2008.

40. S. Medhekar, R. Howard, W. Trappe, Y. Zhang and P. Wolniansky, "Mining Joules and Bits: Towards a Long-Life Pervasive System," in Proceedings of the Fourth International Workshop on System Management Techniques, Processes, and Services (SMTPS), 2008.

41. Y. Liang, Y. Zhang, H. Xiong, R. Sahoo, "Failure Prediction in IBM BlueGene/L Event Logs," in Proceedings of the 2007 IEEE Conference on Data Mining (ICDM), 2007. (101 papers accepted out of 526 submissions)

42. D. Rastogi, S. Ganu, Y. Zhang, W. Trappe, C. Graff, "A Comparative Study of AODV and OLSR on the ORBIT Testbed," in Proceedings of Milcom 2007, 2007.

43. G. Bhanage, Y. Zhang, Y. Zhang, T. Wade, R. Howard, "RollCall : The Design For A Low Cost And Power Efficient Active RFID Asset Tracking System," in Proceedings of Eurocon 2007, 2007.

44. S. Yu, Y. Zhang, "R-Sentry: Providing Continuous Sensor Services against Random Node Failures," in proceedings of IEEE International Conference on Dependable System and Network (DSN), 2007. (48 papers accepted out of 212 submissions)

45. P. Kamat, W. Xu, W. Trappe, Y. Zhang, "Temporal Privacy in Wireless Sensor Networks," in Proceedings of the 27th IEEE Int. Conference on Distributed Computing Systems (ICDCS07), 2007. (71 papers accepted out of 528 submissions)

46. Y. Zhang, G. Bhanage, W. Trappe, Y. Zhang, R. Howard, "Facilitating an Active Transmit-only RFID System through Receiver-based Processing," in Proceedings of the Fourth Annual IEEE Communications Society Conference on Sensor, Mesh, and Ad Hoc Communications and Networks, 2007. (Acceptance Rate: 20%)

47. W. Xu, W. Trappe, Y. Zhang, "Channel Surfing: Defending Wireless Sensor Networks from Jamming and Interference," in Proceedings of the IEEE/ACM International Conference on Information Processing in Sensor Networks (IPSN), 2007. (55 papers accepted out of 216 submissions)

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