

# Xiaoming Wang

3842 167th PL NE APT K3033  
Redmond, WA 98052

Phone: 979-422-7613  
Email: [xmwang@gmail.com](mailto:xmwang@gmail.com)

RESEARCH INTERESTS     Peer-to-peer networks, Internet topologies, mobile networks, performance analysis, probabilistic modeling, network measurements

EDUCATION     ◇ **Texas A&M University**, College Station, TX, USA.  
Ph.D. in Computer Science, August 2009  
◇ **Beijing University of Posts and Telecommunications**, P.R.China.  
M.S. in Computer Technology, April 2002  
B.S. in Computer Engineering, July 1999

EXPERIENCE     ◇ **Windows Azure Group, Microsoft Corp**, Redmond, WA, USA.  
Software Development Engineer, 2009–now.  
◇ **Internet Research Lab, Texas A&M University**, College Station, TX, USA.  
Research Assistant, 2003–2009, Advisor: Dmitri Loguinov.  
◇ **Networking Group, Samsung Advanced Institute of Technology**, South Korea.  
Research Engineer, 2002–2003, Supervisor: Byoung-Joon Lee.  
◇ **PCN&CAD Center, Beijing University of Posts and Telecommunications**, P.R.China.  
Research Assistant, 1999–2002, Advisor: Junde Song.

TEACHING     ◇ Spring 2004, Teaching Assistant, Computer Networks, Texas A&M University  
◇ Fall 2001, Teaching Assistant, Modern Network Management, BUPT, P.R.China

PUBLICATIONS     ◇ **Thesis**  
“Robust and Scalable Sampling Algorithms for Network Measurement,” Ph.D. Dissertation, Texas A&M University, August 2009.

◇ **Refereed Journal**

1. X. Wang, X. Liu, and D. Loguinov, “Understanding and Modeling the Internet Topology: Economics and Evolution Perspective,” *Accepted to IEEE/ACM Transactions on Networking*.
2. H.-T. Lee, D. Leonard, X. Wang, and D. Loguinov, “IRLbot: Scaling to 6 Billion Pages and Beyond,” *ACM Transactions on the Web*, vol. 3, no. 3, June 2009.
3. X. Wang, Z. Yao, and D. Loguinov, “Residual-Based Measurement of Peer and Link Lifetimes in Gnutella Networks,” *IEEE/ACM Transactions on Networking* vol. 17, no. 3, June 2009.
4. Z. Yao, X. Wang, D. Leonard, and D. Loguinov, “Node Isolation Model and Age-Based Neighbor Selection in Unstructured P2P Networks,” *IEEE/ACM Transactions on Networking*, vol. 17, no. 1, February 2009.
5. D. Leonard, Z. Yao, X. Wang, and D. Loguinov, “On Static and Dynamic Partitioning Behavior of Large-Scale P2P Networks,” *IEEE/ACM Transactions on Networking*, vol. 16, no. 6, December 2008.
6. X. Wang and D. Loguinov, “Load-Balancing Performance of Consistent Hashing: Asymptotic Analysis of Random Node Join,” *IEEE/ACM Transactions on Networking*, vol. 15, no. 4, August 2007.
7. D. Loguinov, J. Casas, and X. Wang, “Graph-Theoretic Analysis of Structured Peer-to-Peer Systems: Routing Distances and Fault Resilience,” *IEEE/ACM Transactions on Networking*, vol. 13, no. 5, October 2005.

◇ **Refereed Conference and Workshop**

8. X. Wang, Z. Yao, Y. Zhang, and D. Loguinov, "Robust Lifetime Measurement in Large-Scale P2P Systems with Non-Stationary Arrivals," *IEEE P2P*, September 2009.
9. H.-T. Lee, D. Leonard, X. Wang, and D. Loguinov, "IRLbot: Scaling to 6 Billion Pages and Beyond," *WWW*, April 2008 (Best Paper Award).
10. X. Wang, X. Liu, and D. Loguinov, "Modeling the Evolution of Degree Correlation in Scale-Free Topology Generators," *IEEE INFOCOM*, April 2008.
11. X. Wang, Z. Yao, and D. Loguinov, "Residual-Based Measurement of Peer and Link Lifetimes in Gnutella Networks," *IEEE INFOCOM*, May 2007.
12. Z. Yao, X. Wang, D. Leonard, and D. Loguinov, "On Node Isolation under Churn in Unstructured P2P Networks with Heavy-Tailed Lifetimes," *IEEE INFOCOM*, May 2007.
13. Z. Yao, D. Leonard, X. Wang, and D. Loguinov, "Modeling Heterogeneous User Churn and Local Resilience of Unstructured P2P Networks," *IEEE ICNP*, November 2006.
14. X. Wang and D. Loguinov, "Modeling the Dynamics of the Internet AS-Level Structure: an Economic Perspective," *ISMA Workshop on the Internet Topology (WIT)*, May 2006 (abstract).
15. X. Wang and D. Loguinov, "Wealth-Based Evolution Model for the Internet AS-Level Topology," *IEEE INFOCOM*, April 2006.
16. D. Leonard, Z. Yao, X. Wang, and D. Loguinov, "On Static and Dynamic Partitioning Behavior of Large-Scale Networks," *IEEE ICNP*, November 2005.
17. X. Wang, Y. Zhang, X. Li, and D. Loguinov, "On Zone-Balancing of Peer-to-Peer Networks: Analysis of Random Node Join," *ACM SIGMETRICS*, June 2004.
18. X. Wang, Y. Han, and H. Jang, "A Framework of Enhanced Local Mobility Routing," *IEEE VTC*, October 2003.

◇ **Preprints**

19. Z. Yao, D. Leonard, X. Wang, and D. Loguinov, "Modeling Heterogeneous User Churn and Local Resilience of Unstructured P2P Networks," *Submitted to IEEE/ACM Transactions on Networking*.

PATENTS

◇ **United States**

1. J. Choi, Y. Han, X. Wang, and H. Jang, "Fast Handoff Method with CoA Pre-Reservation and Routing in Use of Access Point in Wireless Networks," *U.S. Patent No. 7,362,756*, Issued: Apr. 22, 2008.
2. S. Singh and X. Wang, "Fast Duplicate Address Detection Entity for Managing Information in Distributed Systems," *U.S. Patent No. 7,260,075*, Issued: Aug. 21, 2007.

AWARDS

- ◇ Texas A&M Graduate Teaching Academy Fellow
- ◇ Student Travel: ACM SIGMETRICS 2004

PROFESSIONAL ACTIVITIES IEEE, Student Member, 2004-.

ACM, Student Member, 2007-.

TALKS

1. "IRLbot: Scaling to 6 Billion Pages and Beyond," *WWW*, Beijing, China, April 2008 (Best Paper Award).
2. "Modeling the Evolution of Degree Correlation in Scale-Free Topology Generators," *IEEE INFOCOM*, Phoenix, AZ, April 2008.
3. "Residual-Based Measurement of Peer and Link Lifetimes in Gnutella Networks," *IEEE INFOCOM*, Anchorage, AK, May 2007.

4. "Modeling the Dynamics of the Internet AS-Level Structure: An Economic Perspective," ISMA Workshop on the Internet Topology, San Diego, CA, May 2006.
5. "Wealth-Based Evolution Model for the Internet AS-Level Topology," IEEE INFOCOM, Barcelona, Spain, April 2006.
6. "On Lifetime-Based Node Failure and Stochastic Resilience of Decentralized Peer-to-Peer Networks," ACM SIGMETRICS, Banff, Canada, June 2005.
7. "On Zone-Balancing of Peer-to-Peer Networks: Analysis of Random Node Join," ACM SIGMETRICS, New York, NY, June 2004.

REFERENCES Available on request.