

## Xiaolan Zhang

Department of Computer and Information Sciences  
338 John Mulcahy Hall  
441 East Fordham Road  
Bronx, NY 10458

Email: xzhang@fordham.edu  
Work: (718) 817-4484  
<http://storm.cis.fordham.edu/~zhang>

---

### RESEARCH INTERESTS

My research interests are in the area of Computer Network and Distributed Systems. I am specifically interested in mobile ad hoc network, disruption tolerant network, multimedia streaming systems, network coding, network (e.g. mobility) trace analysis and modeling, and performance evaluation (through modeling, simulation and experimentation).

### EDUCATIONS

- **Ph.D. in Computer Science** Sept 2007  
UNIVERSITY OF MASSACHUSETTS, AMHERST  
Thesis Title: *Routing in DTN: Performance Modeling, Network Coding Benefit, and Real Mobility Trace Modeling*  
Advisors: Prof. Jim Kurose, Prof. Don Towsley
- **Master of Science (M.S.) in Computer Science** May, 2001  
UNIVERSITY OF MASSACHUSETTS, AMHERST Amherst, MA
- **Bachelor of Science (B.S.) in Computer Science** July, 1992  
BEIJING UNIVERSITY Beijing, China

### PUBLICATIONS Conference and Workshop paper

- **Xiaolan Zhang**, Honggang Zhang, Yu Gu, “Impact of Source Counter on DTN Routing Control under Resource Constraints”, to appear in ACM MobiOpp 2010.
- **Xiaolan Zhang**, Jim Kurose, Brian Levine, Don Towsley, and Honggang Zhang, “Study of a Bus-Based Disruption Tolerant Network: Mobility Modeling and Impact on Routing”, in ACM MobiCom 2007 (acceptance ratio 11%).
- Giovanni Neglia, and **Xiaolan Zhang**, “Optimal Delay-Power Trade-off in Sparse Delay Tolerant Networks: a preliminary study”, *SIGCOMM Challenged Network workshop, 2006*.
- **Xiaolan Zhang**, Giovanni Neglia, Jim Kurose, and Don Towsley, “On the Benefits of Random Linear Coding for Unicast Applications in Disruption Tolerant Networks”, *IEEE Second Workshop on Network Coding, Theory, and Applications, 2006*.
- **Xiaolan Zhang**, Giovanni Neglia, Jim Kurose, and Don Towsley, “Performance Modeling of Epidemic Routing”, *IFIP Networking 2006*, one of the top rank papers and recommended for fast track consideration of Computer Networks journal (acceptance ratio 20.4%).
- **Xiaolan Zhang**, Michael K. Bradshaw, Yang Guo, Bing Wang, Jim Kurose, Prashant Shenoy, and Don Towsley, “AMPS: A Flexible, Scalable Proxy Testbed for Implementing Streaming Services”, *International Workshop on Networking and Operating Systems Support for Digital Audio and Video (NOSSDAV) 2004* (acceptance ratio 25.3%).
- **Xiaolan Zhang**, Don Towsley, and Jack Wileden, “Towards Interoperable Multimedia Streaming Systems”, *International Packet Video workshop, 2002*.

### Journal

- **Xiaolan Zhang**, Giovanni Neglia, Jim Kurose, and Don Towsley, “Performance Modeling of Epidemic Routing”, appeared in *Elsevier Computer Networks journal, 2007, Volume 51/10, pages 2859-2891*.

## Technical Report

- Bing Wang, Michael K. Bradshaw, Yang Guo, Jim Kurose, Subhabrata Sen, Prashant Shenoy, Don Towsley, Wei Wei, **Xiaolan Zhang**, “Empirical Study of Proxy-assisted Video Streaming Over the Best-effort Internet”, *UMass CMPSCI Technical Report 03-33*.

## TALKS

- Study of a Bus-Based Disruption Tolerant Network: Mobility Modeling and Impact on Routing, ACM MobiCom, Sept 2007.
- Disruption Tolerant Networks: Performance and Mobility Trace Modeling, Motorola, March 2007.
- Characterizing a Bus-Based Disruption Tolerant Network, invited talk at International workshop on Wireless Traffic Measurements and Modeling (WitMeMo), August 2006.
- On the Benefits of Random Linear Coding for Unicast Applications in Disruption Tolerant Networks, at IEEE NETCOD, April 2006
- Performance Modeling of Epidemic Routing, at IFIP Networking conference, May 2006
- AMPS: A Flexible, Scalable Proxy Testbed for Implementing Streaming Services, at NOSSDAV, June 2004

## WORK EXPERIENCE

- Assistant Professor  
Department of Computer and Information Science  
FORDHAM UNIVERSITY  
Aug’07-now  
New York, New York
- Senior Software Engineer and Project Leader  
GEOGRAPHICAL INFORMATION SYSTEM LAB,  
BEIJING UNIVERSITY  
Beijing, P.R.China  
Worked on a large-scale Geographical Information System. Responsibilities include system analysis, design, implementation, testing and user training.  
July’93-May’98
- Testing Engineer  
HEWLETT PACKARD CORP.  
Cupertino, CA  
Accepted training in software development process, testing methodology, test cases development and implementation, test result analysis and reporting etc.  
July’93-Jan’94
- Software Engineer  
STATE KEY CASE LAB, BEIJING UNIVERSITY  
Beijing, P.R.China  
Worked on a software design tool. Responsibilities include code maintenance, porting to various systems, user training.  
July’92-July’93

## PROFESSIONAL ACTIVITIES

- Reviewer for many conferences and journals, including IEEE Journal on Selected Areas in Communications, IEEE/ACM Transactions on Networking, ACM Multimedia Systems Journal, IEEE Transaction on Mobile Computing, IEEE Transactions on Vehicular Technology, Elsevier Ad Hoc, International Journal of Ad Hoc and Ubiquitous Computing, International Journal of Communication Systems, ACM Transactions on Autonomous Adaptive Systems, Discrete Applied Mathematics, IEEE International Conference on Mobile Ad-hoc and Sensor Systems, IEEE INFOCOM, IEEE SECON etc.
- Technical program committee member for International Workshop on Quality of Service (IWQoS) 2008, 7th IEEE International Conference on Pervasive Computing and Communication (IEEE PerCom’09), ACM Mobicom workshop on Challenged Networks (CHANT) 2009, IEEE International Conference on Computer Communications and Networks (ICCCN) 2010.