

Biographical Sketch – Bin Wang

Department of Computer Science and Engineering
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Education

Ph.D. The Ohio State University 2000
M.S. The University of Louisville 1994
B.Eng. Zhejiang University, China 1992

Employment

Associate Professor	Department of Computer Science and Engineering	2005–present
Assistant Professor	Department of Computer Science and Engineering Wright State University	2000–2005
Summer Intern	Video Networking Group Panasonic Research, Princeton, NJ	1998
Research Assistant	Department of Electrical Engineering The Ohio State University	1996–2000
Res/Teaching Assistant	Department of Electrical and Computer Engineering The University of Wisconsin-Madison	1994–1996
Res/Teaching Assistant	Department of Computer Science The University of Louisville	1992–1994

Research Areas of Interest

Communication networks, quality of service, dense wavelength division multiplexing (DWDM) optical networks, wireless sensor and mobile networks, network security, network modeling, analysis, simulation, protocol design and development.

Awards and Honors

- 2004-2005 Outstanding Faculty Member Award, College of Engineering and Computer Science, WSU
- 2003 US Department of Energy Early Career Award
- 1997 IEEE Grant Award in Recognition of High Quality Paper, IEEE INFOCOM, Kobe, Japan
- 1993 to 1994 The AT&T Network Systems ISDN Award, AT&T Network Systems, Inc.
- 1991 Zhejiang University Guanghua Fellowship (awarded to top 3% students)

Synergistic Activities

- University honors committee
- Advised university honor students: David Johnson, Jeffrey Alan Shininger
- Advised 3 undergraduate senior design projects: Allen Hena, Michelle Humphray, Kip Streithorst
- Reviewer for INFOCOM, ICNP, ICDCS, OPTICOMM, NOSSDAV, RTSS, RTAS, ICCCN, IEEE/ACM Trans. on Networking, Computer Networks, IEEE Trans. on Parallel and Distributed Systems, IEEE Trans. on Computers, IEEE Networks, IEEE Trans. on Knowledge and Data Engineering, IEEE Communications Magazine
- IEEE ICC 2006, INFOCOM 2004, ICC'05, ICDCS'05 TPC member
- One of the developers of J-Sim, a component-based, compositional simulation tool for networking research, available from <http://j-sim.cs.uiuc.edu>
- Member of IEEE, IEEE Communication Society, ACM, ACM SIGCOMM

Publications Relevant to Proposal

1. Allen Hena[†], Michelle Humphray[†], Kip Streithorst[†], and Bin Wang, "Voice transmission over a wireless local area network " Technical Report, Department of Computer Science and Engineering, Wright State University, 2002.
2. Bin Wang, Xu Su, and P. C. L. Chen, "A Bandwidth Guaranteed Integrated Routing and Wavelength Assignment Algorithm in IP over WDM Optical Networks." *Photonic Network Communications*, Vol. 5, No., pp. 227-246, May 2003.
3. Bin Wang and A. Deshmukh, "An All Hops Optimal Algorithm for Dynamic Routing of Sliding Scheduled Traffic Demands," *IEEE Communications Letters* (in press), 2005.
4. Tianjian Li and Bin Wang, "Cost Effective Shared Path Protection for WDM Optical Mesh Networks with Partial Wavelength Conversion." *Photonic Network Communications Journal*, Vol. 8, No. 3, pp. 251-266, November 2004.
5. Tianjian Li and Bin Wang, "Efficient On-line Algorithms for Dynamic Shared Path Protection in WDM Optical Networks." *Photonic Network Communications Journal*, (in press) 2004.

[†] undergraduate students

Additional Publications

1. Bin Wang and Jennifer C. Hou, "Multicast Routing and Its QoS Extension: Problems, Algorithms, and Protocols." *IEEE Network*, January/February 2000.
2. Bin Wang and Jennifer C. Hou, "An Efficient QoS Routing Algorithm for Quorumcast Communication." *Computer Networks*, Vol. 44, No. 1, pp. 43-61, January 2004.
3. Bin Wang and Jennifer C. Hou, "QoS Routing for Layered Video Distribution to Heterogeneous Receivers in Rate-based Networks." *Proceedings of IEEE INFOCOM'2000, Tel Aviv, Israel, March 2000*.
4. Bin Wang, Jennifer C. Hou, and Ching-Chih Han, "On Dynamically Establishing and Terminating Isochronous Message Streams in WDM-based Networks." *Journal of High Speed Networks*, Vol. 11, No. 1, pp. 45-66, 2002.
5. Hung-Ying Tyan, Jennifer C. Hou, Bin Wang, and Ching-Chih Han, " On Supporting Time-Constrained Communications on WDM-based Light-wave Networks." *IEEE Transactions on Computers*, Vol. 50, No. 3, March 2001.

List of Collaborators within 48 Months

Jennifer C. Hou (UIUC), Hung-Ying Tyan (National Sun Yat-sen University), Jun Xu (Georgia Tech), Yong Pei (WSU), Guozhu Dong (WSU)

Graduate Advisors

Dr. Jennifer C. Hou (dissertation advisor), Dr. Stanley C. Ahalt (dissertation committee member), Dr. Yuan F. Zheng (dissertation committee member), Aly A. Farag (master's thesis advisor, University of Louisville)

Graduate Advisees (as Supervisor or Co-Supervisor)

Abdur Billah (Ph.D., completed), Michael E. Greene (Ph.D.), Tianjian Li (Ph.D.), Xubin Luo (Ph.D.), Yuqi Fan (Ph.D.), Ashish Deshmukh (M.S.), Nanda Lella (M.S.), Madhu Thender (M.S.), Shilpa Muniswamyreddy (M.S.), Nidhi Jain (M.S.), Chava Sowjanya (M.S.), Xu Su (M.S.)