

# Jie Wu

IEEE Fellow

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## 1 Educational Background

- Ph.D. in Computer Engineering, Florida Atlantic University, Boca Raton, FL, 8/89
- M.S. in Computer Science, Shanghai University of Science and Technology (now Shanghai University), Shanghai, P. R. of China, 7/85
- B.S. in Computer Engineering, Shanghai University of Science and Technology, Shanghai, P. R. of China, 7/82

## 2 Employment History

- Program Director, National Science Foundation (NSF) 1/07-1/09
- Distinguished Professor, Florida Atlantic University 9/06-present
- Professor, Florida Atlantic University 8/98-8/06
- Associate Professor, Florida Atlantic University 8/94-7/98
- Assistant Professor, Florida Atlantic University 8/89-7/94
- Lecturer, Shanghai University of Science and Technology 7/85-1/87

## 3 Research Interests

Mobile Computing and Wireless Networks

Routing Protocols

Computer and Network Security

Distributed Computing

Fault-Tolerant Systems

Parallel Processing

Interconnection Networks

### 3.1 Refereed Journals

(selected from 148 journal publications)

1. D. Guo, J. Wu, H. Chen, Y. Yuan, and X. Luo, "The Dynamic Bloom Filters," accepted to appear in *IEEE Transactions on Knowledge and Data Engineering*.
2. S. Yang, and J. Wu, "Efficient Broadcasting Using Network Coding and Directional Antennas in MANETs," accepted to appear in *IEEE Transactions on Parallel and Distributed Systems*.
3. C. Liu and J. Wu, "Scalable Routing in Cyclic Mobile Networks," accepted to appear in *IEEE Transactions on Parallel and Distributed Systems*.
4. M. Lu, F. Li, and J. Wu, "Efficient Opportunistic Routing in Utility-Based Ad Hoc Networks," accepted to appear in *IEEE Transactions on Reliability*.
5. C. Liu and J. Wu, "Virtual-Force-Based Geometric Routing Protocol in MANETs," accepted to appear in *IEEE Transactions on Parallel and Distributed Systems*, Vol. 20, No. 3, 2009, 433-445.
6. Z. Jiang, J. Wu, and D. Yang, "A New Fault Information Model for Fault-Tolerant Adaptive and Minimal Routing in 3-D Meshes," accepted to appear in *IEEE Transactions on Reliability*, Vol. 57, No. 1, March 2008, 149-162.
7. S. Yang, J. Wu, and F. Dai, "Efficient Directional Network Backbone Construction in Mobile Ad Hoc Networks," *IEEE Transactions on Parallel and Distributed Systems*, Vol. 19, No. 12, Dec. 2008, 1601-1613.
8. M. Lu, J. Yu and J. Wu, "Free-Riding on BitTorrent-like Peer-to-Peer File Sharing Systems: Modeling Analysis and Improvement," *IEEE Transactions on Parallel and Distributed Systems*, Vol. 19, No. 7, July 2008, 954 - 966.
9. J. Wu, S. Yang, and F. Dai, "Iterative Local Solutions for Connected Dominating Set in Ad Hoc Wireless Networks," *IEEE Transactions on Computers*, Vol. 57, No. 5, May 2008, 702 - 715.
10. B. Wu, J. Wu, and Y. Dong, "An Efficient Group Key Management Scheme for Mobile Ad Hoc Networks," accepted to appear in *International Journal of Security and Networks (IJSN)*.
11. Q. Yuan, J. Wu, and I. Cardei, "SMRS: A Scalable Multi-Path Routing Scheme," accepted to appear *International Journal of Parallel, Emergent and Distributed Systems*.
12. V. Ponce, J. Wu, and X. Li, "An Approach to Combating Free-riding in Peer-to-Peer Networks," accepted to appear in *International Journal of Parallel, Emergent and Distributed Systems*.
13. I. Jawhar and J. Wu, "Resource Allocation for Real-Time and Multimedia Communication in TDMA-Based Wireless Networks," accepted to appear in *International Journal of Ad Hoc and Ubiquitous Computing (IJAHUC)*, Inderscience Publishers.

14. J. Wu and S. Yang, "Small World Model-based Polylogarithmic Routing using Mobile Nodes," accepted to appear in the *Journal of Computer Science and Technology*.
15. I. H. Jawhar and J. Wu, "A Routing Protocol for Resource Scheduling in Wireless Networks Using Directional Antennas," accepted to appear in *EURASIP Journal on Wireless Communications and Networking*.
16. A. Srinivasan, F. Li, J. Wu, and M. Li, "Secure Clique-based Group Key Assignment in Wireless Sensor Networks," accepted to appear in *International Journal of Security and Networks (IJSN)*.
17. F. Li, A. Srinivasan, and J. Wu, "PVFS: A Probabilistic Voting-based Filtering Scheme in Wireless Sensor Networks," accepted to appear in *International Journal of Security and Networks (IJSN)*.
18. C. Yang, X. Li, and J. Wu, "Dominating-Set-Based Searching in Peer-to-Peer Networks," accepted to appear in *International Journal of High Performance Computing and Networking*.
19. J. Sum, J. Wu, and C. -S. Leung, "On Profit Density-Based Greedy Algorithms for a Resource Allocation Problem in Web Services," accepted to appear in *International Journal of Computer Applications*.
20. M. Ye, C. Li, G. H. Chen, and J. Wu, "EECS: An Energy Efficient Clustering Scheme in Wireless Sensor Networks," accepted to appear in *International Journal of Ad Hoc & Sensor Wireless Networks*.
21. M. Lu, J. Wu, M. Cardei, and M. Li, "Energy-Efficient Connected Coverage of Discrete Targets in Wireless Sensor Networks," accepted to appear in *International Journal of Ad Hoc and Ubiquitous Computing*.
22. S. Yang, F. Dai, M. Cardei, J. Wu, and F. Patterson, "On Connected Multiple Point Coverage in Wireless Sensor Networks," accepted to appear in *International Journal of Wireless Information Networks*.
23. M. Cardei, J. Wu, and M. Lu, "Improving Network Lifetime using Sensors with Adjustable Sensing Ranges," accepted to appear in *International Journal of Sensor Networks*.
24. X. Li, S. Zhong, and J. Wu, "ISRL: Intelligent Search by Reinforcement Learning in Unstructured Peer-to-Peer Networks," *International Journal of Parallel, Emergent, and Distributed Systems (IJPEDS)*, Vol. 23, No. 1, February 2008, 17-44.
25. K. Ho, J. Wu, and J. Sum, "On the Session Lifetime Distribution of Gnutella," *International Journal of Parallel, Emergent and Distributed Systems (IJPEDS)*, Vol. 23, No. 1, February 2008, 1-15.
26. J. Wu, S. Yang, and F. Dai, "Logarithmic Store-Carry-Forward Routing in Mobile Ad Hoc Networks," *IEEE Transactions on Parallel and Distributed Systems*, Vol. 18, No. 6, June 2007.

27. S. Yang, M. Li, and J. Wu, "Scan-Based Movement-Assisted Sensor Deployment Methods in Wireless Sensor Networks," *IEEE Transactions on Parallel and Distributed Systems*, Vol. 18, No. 7, July 2007.
28. F. Dai and J. Wu, "On Constructing  $k$ -Connected  $k$ -Dominating Set in Wireless Networks," *Journal of Parallel and Distributed Computing (JPDC)*, 2007.
29. W. Lou and J. Wu, "Towards Broadcast Reliability in Mobile Ad Hoc Networks With Double Coverage," *IEEE Transactions on Mobile Computing*, Vol. 6, No. 2, February 2007, 148-163.
30. F. Dai and J. Wu, "Control Frame Shaping in Power Controlled and Directional MAC Protocols," *Ad Hoc & Sensor Wireless Networks: An International Journal*, 2007.
31. B. Roussev and J. Wu, "Automatic Transformation from Use Cases to Class Models and OCL Constraints," *International Journal of Computers and Applications*, 2007.
32. A. Srinivasan, J. Wu, and J. Teitelbaum, "Distributed Reputation-Based Secure Localization in Sensor Networks," a special issue of *Journal of Autonomic and Trusted Computing*, 2007.
33. G. Chen, C. Li, M. Ye, and J. Wu, "An Unequal Cluster-Based Routing Protocol in Wireless Sensor Networks," *Wireless Networks*, 2007.
34. B. Wu, J. Wu, E. Fernandez, M. Ilyas, and S. Magliveras, "Secure and Efficient Key Management in Mobile Ad Hoc Networks," *Journal of Network and Computer Applications*, 30, 2007, 937-954.
35. J. Sum, J. Wu, and K. Ho, "Analysis on a Localized Pruning Method for Connected Dominating Sets," *Journal of Information Science and Engineering (JISE)*, 2007.
36. X. Li and J. Wu, "A Hybrid Searching Scheme in Unstructured Peer-to-Peer Networks," *International Journal of Parallel, Emergent and Distributed Systems*, January 2007; Vol. 22, No. 1, 15-38.
37. J. Wu, W. Lou, and F. Dai, "Extended Multipoint Relays to Determine Connected Dominating Sets in MANETs," *IEEE Transactions on Computers*, Vol. 55, No. 3, March 2006, 334-347.
38. F. Dai and J. Wu, "Efficient Broadcasting in Ad Hoc Networks Using Directional Antennas," *IEEE Transactions on Parallel and Distributed Systems*, Vol. 17, No. 4, April 2006, 335-347.
39. M. Cardei, J. Wu, and S. Yang, "Topology Control in Ad Hoc Wireless Networks using Cooperative Communication," *IEEE Transactions on Mobile Computing*, Vol. 5, No. 6, June 2006, 711-724.
40. J. Wu and F. Dai, "Mobility-Sensitive Topology Control in Mobile Ad Hoc Networks," *IEEE Transactions on Parallel and Distributed Systems*, Vol. 17, No. 6, June 2006, 522-535.

41. J. Wu, M. Cardei, F. Dai, and S. Yang, "Extended Dominating Set and Its Applications in Ad Hoc Networks Using Cooperative Communication," *IEEE Transactions on Parallel and Distributed Systems*, Vol. 17, No. 8, August 2006.
42. J. Wu and F. Dai, "Virtual Backbone Construction in MANETs using Adjustable Transmission Ranges," *IEEE Transactions on Mobile Computing*, Vol. 5, No. 9, September 2006, 1188-1200.
43. Y. Wang and J. Wu, "Label Routing Protocol: A New Cross-layer Protocol for Multi-Hop Ad Hoc Wireless Networks," *Journal of Pervasive Computing and Communications*. Vol. 1, No. 1, January 2006.
44. Z. Jiang and J. Wu, "A Limited-Global Information Model for Fault-Tolerant Routing in Dual-Cubes," *International Journal of Parallel, Emergent and Distributed Systems*, Vol. 21, No. 1, 2006, 61-77.
45. B. Roussev, J. Wu, and L. Liu, "Distributed Computing Using Java: A Comparison of Two Server Designs," 52, *Journal of Systems Architecture*, 2006, 432-440.
46. M. Cardei and J. Wu, "Energy-Efficient Coverage Problems in Wireless Ad-Hoc Sensor Networks," *Computer Communications Journal*, Vol. 29, No. 4, 2006, 413 - 420.
47. J. Wu and Z. Jiang, "On Constructing the Minimum Orthogonal Convex Polygon in 2-D Faulty Meshes," *IEEE Transactions on Reliability*, Vol. 54, No. 3, September 2005, 449-458.
48. J. Wu, F. Gao, Z. Li, and Y. Min, "Optimal and Reliable Communication in Hypercubes using Extended Safety Vectors," *IEEE Transactions on Reliability*, Vol. 54, No. 3, September 2005, 402-411.
49. J. Wu and F. Dai, "Efficient Broadcasting with Guaranteed Coverage in Mobile Ad-Hoc Networks," *IEEE Transactions on Mobile Computing*, Vol. 4, No. 3, May/June 2005, 1-12.
50. I. Jawhar and J. Wu, "Race-Free Resource Allocation for QoS Support in Wireless Networks," *Ad Hoc & Sensor Wireless Networks: An International Journal*, Vol. 1, No. 3, May 2005, 179-206.
51. F. Dai and J. Wu, "A Highly Reliable Multi-Path Routing Scheme for Ad Hoc Wireless Networks," *International Journal of Parallel Algorithms and Applications*, 2005.
52. J. Wu and L. Sheng, "Deadlock-Free Multicasting in Irregular Networks Using Prefix Routing," *The Journal of Supercomputing*, Vol. 31, No. 1, January 2005, 127-133.
53. M. Agarwal, J. H. Cho, L. X. Gao, and J. Wu, "Energy Efficient Broadcast in Wireless Ad Hoc Networks with Hitch-Hiking," *ACM/Kluwer MONET*, a special issue on *Energy Constraints and Lifetime Performance in Wireless Sensor Networks*, Vol. 10, No. 6, December 2005, 897-910.
54. F. Dai, Q. Dai, and J. Wu, "Power Efficient Routing Trees for Ad-Hoc Wireless Networks Using Directional Antenna," *International Journal of Ad-Hoc Networks*, No. 3, 2005, 608-620.

55. I. Jawhar and J. Wu, "QoS Support in TDMA-Based Mobile Ad Hoc Networks," *Journal of Computer Science and Technology*, Vol. 20, No. 6, 2005, 797-810.
56. J. Wu and D. Wang, "Fault-Tolerant and Deadlock-Free Routing in 2-D Meshes Using Rectilinear-Monotone Polygonal Fault Blocks," *International Journal of Parallel, Emergent and Distributed Systems*, Vol. 20, No. 2, June 2005, 99-111.
57. J. Wu and S. Yang, "Energy-Efficient Node Scheduling Models in Sensor Networks with Adjustable Ranges," *International Journal of Foundations of Computer Science*, Vol. 16, No. 1, February 2005, 3-17.
58. Q. Dai and J. Wu, "Computation of Minimal Uniform Transmission Range in Ad-Hoc Wireless Networks," *Cluster Computing*, Vol. 8, 2005, 127-133.
59. F. Dai and J. Wu, "Performance Analysis of Broadcast Protocols in Ad-Hoc Networks Based on Self-Pruning," *IEEE Transactions on Parallel and Distributed Systems*, Vol.15, No.11, Nov. 2004, 1027-1040.
60. J. Wu and F. Dai, "A Generic Distributed Broadcast Scheme in Ad-Hoc Wireless Networks," *IEEE Transactions on Computers*, Vol. 15, No. 10, Oct. 2004, 908-920.
61. F. Dai and J. Wu, "An Extended Localized Algorithm for Connected Dominating Set Formation in Ad-Hoc Wireless Networks," *IEEE Transactions on Parallel and Distributed Systems*, Vol. 53, No. 10, Oct. 2004, 1343-1354.
62. J. Wu and F. Dai, "Mobility Control and Its Applications in Mobile Ad-Hoc Networks," *IEEE Network*, Vol.18, No.4, July/Aug. 2004, 30-35.
63. C. -S. Leung, J. Sum, H. Shen, J. Wu, and G. H. Young, "Analysis and Design of an Agent Searching Algorithm for E-Marketplaces," *Journal of Cluster Computing*, 7, 2004, 85-90.
64. J. Shen, L. Sheng, and J. Wu, "Searching for Sorted Sequences of Kings in Tournaments," *SIAM Journal of Computing*, 32, 5, 2003, 1201-1209.
65. J. Wu, "Optimal Broadcasting in Injured Hypercubes Using Directed Safety Levels," *Journal of Parallel and Distributed Computing*, 63, 2003, 815-826.
66. J. Wu and L. Sheng, "Deadlock-Free Routing in Irregular Networks Using Prefix Routing," *Parallel Processing Letters*, Vol. 13, No. 4, 2003, 705-720.
67. J. Wu, F. Dai, X. Lin, J. Cao, and W. Jia, "An Extended Fault-Tolerant Link-State Routing Protocol in the Internet," *IEEE Transactions on Computers*. Vol. 52, No. 10, Oct. 2003, 1298-1311.
68. J. Wu, "A Fault-Tolerant and Deadlock-Free Routing Protocol in 2-D Meshes Based on Odd-Even Turn Model," *IEEE Transactions on Computers*, Vol. 52, No. 9, Sept. 2003, 1154-1169.
69. D. Xiang, A. Chen, and J. Wu, "Reliable Broadcasting in Wormhole-Routed Hypercube-Connected Networks Using Local Safety Information," *IEEE Transactions on Reliability*, 52, 2, June 2003, 245-256.

70. J. Wu and S. Olariu, "On Cost-Optimal Merge of Two Intransitive Sorted Sequences," *International Journal of Foundations of Computer Science*, Vol. 14, No. 1, Feb. 2003, 99-106.
71. J. Sum, H. Shen, J. Wu, C. -S. Leung, and G. Young, "Analysis on Extended Ant Routing Algorithms for Network Routing and Management," *The Journal of Supercomputing*, 24, 2003, 327-340.
72. J. Wu, B. Wu, and I. Stojmenovic, "Power-Aware Broadcasting and Activity Scheduling in Ad-Hoc Wireless Networks Using Connected Dominating Sets," *Wireless Communications and Mobile Computing (WCNC)*, a special issue on *Research in Ad-Hoc Networking, Smart Sensing, and Pervasive Computing*, 3, 4, June 2003, 425-438.
73. Z. Jiang and J. Wu, "Fault-Tolerant Broadcasting in 2-D Wormhole-Routed Meshes," *Journal of Supercomputing*, 25, 3, July 2003, 255-275.
74. J. Wu and F. Dai, "Broadcasting in Ad-Hoc Networks Based on Self-Pruning," *International Journal of Foundations of Computer Science*, Vol. 14, No. 2, April 2003, 201-221.
75. J. Wu and F. Dai, "QoS Routing in Hypercube Multicomputers," *Parallel Processing Letters*, Vol. 13, No. 1, March 2003, 43-52.
76. J. Wu and W. Lou, "Forward Node Set Based Broadcast in Clustered Mobile Ad-Hoc Networks," *Wireless Communications and Mobile Computing (WCNC)*, a special issue on *Algorithmic, Geometric, Graph, Combinatorial, and Vector Aspects of Wireless Networks and Mobile Computing*, Vol. 3, No. 2, March 2003, 141-154.
77. L. Sheng and J. Wu, "Maximum-Shortest-Path (MSP) Is Not Optimal For a General  $N \times N$  torus," *IEEE Transactions on Reliability*, 52, 1, March 2003, 22-25.
78. J. Wu, "An Extended Dynamic Source Routing Scheme in Ad-Hoc Wireless Networks," *Telecommunication Systems*, a special issue on *Wireless Networks and Mobile Computing*, 22, 1-4, 2003, 61-75.
79. W. Lou and J. Wu, "On Reducing Broadcast Redundancy in Ad-Hoc Wireless Networks," *IEEE Transactions on Mobile Computing*, Vol. 1, No. 2, April-June 2002, 111-122. in 3-D
80. J. Wu, "Extended Dominating-Set-Based Routing in Ad-Hoc Wireless Networks with Unidirectional Links," *IEEE Transactions on Parallel and Distributed Systems*, 13, 9, Sept. 2002, 866-881.
81. J. Wu, "A Distributed Formulation of Smallest Faulty Orthogonal Convex Polygons in 2-D Meshes," *Journal of Parallel and Distributed Computing*, Vol. 62, 2002, 1168-1185.
82. J. Wu, "A Fault-Tolerant Adaptive and Minimal Routing Scheme in  $n$ -D Meshes," *The Computer Journal*, Vol. 45, No. 3, 2002, 349-363.

83. S. Datta, I. Stojmenovic, and J. Wu, "Internal Node and Shortcut-Based Routing with Guaranteed Delivery in Wireless Networks," *Cluster Computing Journal*, a special issue on *Mobile Ad-Hoc Networking*, Vol 5, No. 2, April 2002, 169-178.
84. F. He and J. Wu, "An Efficient Parallel Implementation of the Everglades Landscape Fire Model Using Checkpointing," *Parallel Computing*, Vol. 28, 2002, 65-82.
85. J. Wu and F. Dai, "On Locality of Dominating Set in Ad-Hoc Networks with Switch-On/Off Operations," *Journal of Interconnection Networks*, a special issue on *Algorithms for Networks*, Vol. 3, No. 3 & 4, Sept.& Dec. 2002, 129-147.
86. J. Wu, F. Dai, M. Gao, and I. Stojmenovic "On Calculating Power-Aware Connected Dominating Set for Efficient Routing in Ad-Hoc Wireless Networks," *Journal of Communications and Networks*, Vol. 5, No. 2, March 2002, 169-178.
87. J. Wu and L. Sheng, "An Efficient Sorting Algorithm for a Sequence of Kings in a Tournament," *Information Processing Letters*, 79, 2001, 297-299.
88. J. Wu and H. Li, "A Dominating Set-Based Routing Scheme in Ad-Hoc Wireless Networks," *Telecommunication Systems*, a special issue on *Wireless Networks*, Vol 18, No. 1-3, 2001, 13-36.
89. J. Wu and Y. Yang, "The Postal Network: A Recursive Network for Parameterized Communication Model," *The Journal of Supercomputing*, 19, 2001, 141-159.
90. J. Wu, "On Finding a Hamiltonian Path in a Tournament Using Semi-Heap," *Parallel Processing Letters*, Vol. 10, No. 4, 2000, 279-294.
91. L. Sheng and J. Wu, "A Note on 'A Tight Lower Bound on the Number of Channels Required for Deadlock-Free Wormhole Routing'," *IEEE Transactions on Computers*, 49, (9), Sept. 2000, 1005.
92. S. Cang and J. Wu, "Time-Step Optimal Broadcasting in 3-D Meshes with Minimum Total Communication Distance," *Journal of Parallel and Distributed Computing*, 60, 2000, 966-997.
93. S. Q. Zheng and J. Wu, "Dual of a Complete Graph as an Interconnection Network," *Journal of Parallel and Distributed Computing*, 60, 2000, 1028-1046.
94. J. Wu, "Fault-Tolerant Adaptive and Minimal Routing in Mesh-Connected Multicomputers Using Extended Safety Levels," *IEEE Transactions on Parallel and Distributed Systems*, 11, (2), Feb. 2000, 149-159.
95. A. C. Wynn and J. Wu, "The Effect of Compression on Performance in a Demand Paging System," *Journal of Systems and Software*, 30, 2000, 151-170.
96. J. Wu, "Maximum-Shortest-Path (MSP): An Optimal Routing Policy for Mesh-Connected Multicomputers," *IEEE Transactions on Reliability*, 48, (3), Sept. 1999, 247-255.
97. J. Wu and G. Guo, "Fault-Tolerant Measures for  $m$ -ary  $n$ -dimensional Hypercubes Based on Forbidden Faulty Sets," *IEEE Transactions on Computers*, 47, (8), Aug. 1998, 883-887.



98. J. Wu, E. B. Fernandez, and Y. Luo, "Embedding of Binomial Trees in Hypercubes with Link Faults," *Journal of Parallel and Distributed Computing*, Vol. 54, 1998, 59-74.
99. J. Wu, "Fault-Tolerant Communication in Multiple Bus Systems," *Parallel Processing Letters*, a special issue on *Computing on Bus-Based Architectures*. Vol. 8, No. 3, 1998, 307-320,
100. J. Wu, E. B. Fernandez, and D. Dai, "Fault-Secure Scheduling," *The Computer Journal*, 41, (4), 1998, 207-222.
101. J. Wu, "Adaptive Fault-Tolerant Routing in Cube-Based Multicomputers Using Safety Vectors," *IEEE Transactions on Parallel and Distributed Systems*, 9, (4), April 1998, 321-334.
102. J. Wu, "Extended Fibonacci Cubes," *IEEE Transactions on Parallel and Distributed Systems*, 8, (12), Dec. 1997, 1203-1210.
103. J. Wu and K. Huang, "The Balanced Hypercube: A Cube-Based System for Fault-Tolerant Applications," *IEEE Transactions on Computers*, 46, (4), April 1997, 484-491.
104. J. Wu, "Reliable Unicasting in Faulty Hypercubes Using Safety Levels," *IEEE Transactions on Computers*, 46, (2), Feb. 1997, 241-247.
105. J. Wu, "Dimension-Exchange-Based Global Load Balancing in Faulty Hypercubes," *Concurrency: Practice and Experience*, 9, (1), Jan. 1997, 41-61.
106. H. Qian and J. Wu, "Enhanced Fibonacci Cubes," *The Computer Journal*, 39, (4), 1996, 331-345.
107. J. Wu, E. B. Fernandez, and M. Zhang, "Modelling of Hybrid Fault-Tolerant Software with Cost Constraints," *Journal of Systems and Software*, 33, (2), Nov. 1996, 141-149.
108. J. Wu and K. Yao, "Fault-Tolerant Multicasting in Hypercubes Using Limited Global Information," *IEEE Transactions on Computers*, 44, (9), Sept. 1995, 1162-1166.
109. J. Wu, "Tight Bounds on the Number of  $L$ -nodes in a Faulty Hypercube," *Parallel Processing Letters*, 5, (2), 1995, 321-328.
110. L. Brown and J. Wu, "Snooping in Fault-Tolerant Distributed Shared Memories," *Journal of Systems and Software*, May 1995, 149-166.
111. J. Wu, "Safety Level – An Efficient Mechanism for Achieving Reliable Broadcasting in Hypercubes," *IEEE Transactions on Computers*, 44, (5), May 1995, 702-705.
112. J. Wu and E. B. Fernandez, "Using Petri Nets for Determining Conversation Boundaries in Fault-Tolerant Software," *IEEE Transactions on Parallel and Distributed Systems*, 5, (10), Oct. 1994, 1106-1112.

113. J. Wu, "An Optimal Fault-Tolerant Nonredundant Broadcasting Scheme in Injured Hypercubes," *Journal of Parallel and Distributed Computing*, 22, (2), August 1994, 295-313.
114. J. Wu, E. B. Fernandez, and R. Zhang, "Some Extensions to the Lattice Model in Multilevel Computer Security," *Computers and Security*, 11, (4), 1992, 357-369.
115. J. Wu and E. B. Fernandez, "A Simplification of A Conversation Design Scheme Using Petri Nets," *IEEE Transactions on Software Engineering*, 15, (5), May 1989, 658-660.

### 3.2 Conference Proceedings

(those with acceptance rate < 30% selected from 295 conference articles)

1. C. Liu and J. Wu, "An Optimal Probabilistically Forwarding Protocol in Delay Tolerant Networks," accepted to appear in the *Proc. of 10th ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc)*, 2009.
2. Q. Yuan, I. Cardei, and J. Wu, "An Optimal Probabilistically Forwarding Protocol in Delay Tolerant Networks," accepted to appear in the *Proc. of 10th ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc)*, 2009.
3. F. Li and J. Wu, "MOPS: Providing Content-based Service in Disruption-tolerant Networks," *Proc. of 29th International Conference on Distributed Computing Systems (ICDCS)*, 2009.
4. F. Li, A. Srinivasan, and J. Wu, "Thwarting Blackhole Attacks in Disruption-Tolerant Networks using Encounter Tickets," *Prof. of 27th Annual Joint Conf. of IEEE Communication and Computer Society (INFOCOM)*, 2009.
5. M. Li and J. Wu, "Opportunistic Routing Algebra and Its Applications," *Prof. of 27th Annual Joint Conf. of IEEE Communication and Computer Society (INFOCOM)*, 2009.
6. C. Liu and J. Wu, "Efficient Geometric Routing in Three Dimensional Ad Hoc Networks," *Prof. of 27th Annual Joint Conf. of IEEE Communication and Computer Society (INFOCOM) (Mini-conference)*, 2009.
7. R. Thanawala, J. Wu, and A. Srinivasan, "Efficient Resource Discovery in Mobile Ad Hoc Networks," *Proc. of IEEE International Conference on Communications (ICC)*, 2009.
8. C. Liu and J. Wu, "Efficient Adaptive Routing in Delay Tolerant Networks," *Proc. of IEEE International Conference on Communications (ICC)*, 2009.
9. F. Li and J. Wu, "FRAME: AN Innovative Incentive Scheme in Vehicular Networks," *Proc. of IEEE International Conference on Communications (ICC)*, 2009.
10. C. Liu and J. Wu, "Routing in a Cyclic MobiSpace," accepted to appear in the *Proc. of 9th ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc)*, 2008.

11. Z. Jiang and J. Wu, "A Hierarchical Structure based Coverage Repair in Wireless Sensor Networks," *Proc. of IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC'08)*, 2008.
12. J. Wu, M. Lu, and F. Li, "Utility-Based Opportunistic Routing in Multi-hop Wireless Networks," *Proc. of 28th International Conference on Distributed Computing Systems (ICDCS)*, 2008.
13. Y. Wang and J. Wu, "A Nonblocking Approach for Reaching an Agreement on Request Total Orders," *Proc. of 28th International Conference on Distributed Computing Systems (ICDCS)*, 2008.
14. J. Wu, S. Yang, and M. Cardei, "On Maintaining Sensor-Actor Connectivity in Wireless Sensor and Actor Networks," *Proc. of 26th Annual Joint Conf. of IEEE Communication and Computer Society (INFOCOM)*, 2008.
15. Z. Jiang, J. Ma, and W. Lou, and J. Wu, "An Information Model for Geographic Greedy Forwarding in Wireless Ad Hoc Sensor Networks," *Proc. of 26th Annual Joint Conf. of IEEE Communication and Computer Society (INFOCOM)*, 2008.
16. Q. Yuan and J. Wu, "DRIP: A Dynamic Voronoi Regions-Based Publish/Subscribe Protocol in Mobile Computing," *Proc. of 26th Annual Joint Conf. of IEEE Communication and Computer Society (INFOCOM) (Mini-conference)*, 2008.
17. C. Liu and J. Wu, "Adaptive Routing in Dynamic Ad Hoc Networks," *Proc. of IEEE Wireless Communications & Networking Conference (WCNC)*, 2008.
18. Y. Yang, M. Cardei, and J. Wu, "Non-Uniform Sensor Deployment in Mobile Wireless Sensor Networks," *Proc. of IEEE International Symposium on a World of Wireless Mobile and Multimedia Networks, (WoWMoM)*, June 2008.
19. C. Liu and J. Wu, "Scalable Routing in Delay Tolerant Networks," *Proc. of ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc)*, 2007.
20. M. Lu and J. Wu, "Localized Access Point Selection in Infrastructure Wireless WLAN," *Proc. of IEEE Military Communications Conference (MilCom)*, 2007.
21. F. Li and J. Wu, "Authentication Via Ambassadors: A Novel Authentication Mechanism in MANETs," *Proc. of IEEE Military Communications Conference (MilCom)*, 2007.
22. J. Wu and S. Yang, "Polylogarithmic Store-Carry-Forward Routing using Mobile Nodes," *Proc. of IEEE Mobile Ad-Hoc and Sensor Systems (MASS)*, 2007.
23. M. Cardei, S. Yang, and J. Wu, "Fault-Tolerant Topology Control Algorithms for Heterogeneous Wireless Sensor Networks," *Proc. of IEEE Mobile Ad-Hoc and Sensor Systems (MASS)*, 2007.
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### 3.3 Books and Book Chapters

(selected from 2 books and 28 book chapters)

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### 3.4 Department Technical Reports (80)

### 3.5 Keynote Speeches (13)

- Keynote Speaker: A Utility-based Routing Scheme in Ad Hoc Networks. *2008 International Conference on WIREless Algorithms, Systems and Applications (WASA)*, Oct. 2008.
- Keynote Speaker: Mobility in Ad Hoc Wireless Networks: Friend or Foe. *The 8th IEEE International Symposium on Network Computing and Applications (NCA)*, July 2008.
- Keynote Speaker: Mobility in Ad Hoc Wireless Networks: Friend or Foe. *2008 International Conference on Networking, Architecture, and Storage (NAS)*, July 2008.
- Keynote Speaker: A Utility-based Routing Scheme in MANETs, *The 4th IEEE International Conference on Mobile Ad-Hoc and Sensor Systems (MASS)*, Oct. 2007.
- Keynote Speaker: Mobility in Wireless Networks: Blessing or Curse. *The 4th Annual International Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services (MOBIQUITOUS 2007)*, Aug. 2007.
- Keynote Speaker: Controlled Store-Carry-Forward Routing in Mobile Ad Hoc Networks. *The First International Workshop on Specialized Ad Hoc Networks and Systems (SAHNS 2007)*, in conjunction with IEEE ICDCS'07, June 2007.
- Keynote Speaker: The 2nd International Conference on Mobile Ad-Hoc and Sensor Networks (MSN), 2006.
- Keynote Speaker: The 6th International Workshop on Parallel and Distributed Scientific and Engineering Computing (PDSEC), 2005.
- Keynote Speaker: The 3rd International Workshop on Mobile Distributed Computing (MDC), 2005.

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- Keynote Speaker: International Conference on Parallel and Distributed Computing, Applications and Technologies (PDCAT), 2004.
- Keynote Speaker: International Symposium on Parallel Processing and Applications, 2003.
- Keynote Speaker: International Conference on Parallel and Distributed Computing and Networks, 1998.

### 3.6 Presentations (Invited Seminars)(100)

Wayne State University, Georgia Institute of Technology, Ohio State University (Distinguished Lecture), Inner Mongolia University (China), Central South University (China), Montclair State University, University of Buenos Aires (Argentina), Hong Kong Baptist University (Hong Kong), Wuhan University (China), American University in Beirut, Zhongshan University (China), George Washington University, West Chester University, National University of Defense Technology (China), Xiamen University (China), Michigan State University, McGill University (Canada), University of Tsukuba (Japan), University of Massachusetts at Amherst, University of Nebraska at Lincoln, Northeastern University (China), Polytechnic University of Milan (Italy), University of Connecticut, University of Alabama, Academy of Sciences (Taiwan), Tamkang University (Taiwan), National Qiaotong University (Taiwan), Zhejiang University (China), Kent State University, Hong Kong Polytechnic University (Hong Kong), University of Minnesota (sponsored by Cray Inc.), University of Cincinnati (IEEE Distinguished Lecture), IEEE Ottawa Chapter (Canada) (IEEE Distinguished Lecture), City University of Hong Kong, Shanghai Jiaotong University, Shanghai University, IEEE Central Texas Chapter (IEEE Distinguished Lecture), Motorola (Plantation, FL), Southwest Texas State University, University of Toledo, IEEE Philadelphia Chapter (IEEE Distinguished Lecture), Univ. of New South Wales (Australia), Old Dominion University, National Central University (Taiwan), National Taiwan University (Taiwan), National Tsinghua University (Taiwan), National Cheng-Kung University (Taiwan), Tokyo Denki University (Japan), The University of Vermont, Nanjing University (China), Xi'an Qiaotong University (China), Chinese Academy of Science (China), Tsinghua University (China), American University of Bulgaria (Bulgaria), University of Newcastle Upon Tyne (England), Motorola (Boynton Beach, FL), Shanghai Railway University (China), Louisiana State University, Polish Academy of Sciences (Poland), Shanghai University of Science and Technology (China) Polytechnic University of Madrid (Spain), University of Hong Kong (Hong Kong), Georgia Institute of Technology, University of Rhode Island, IEEE Palm Beach Chapter, Utah State University, and Xavier University.

## 4 Sponsored Research

- Energy-Efficient Design in Wireless Networks Using Cooperative Communication (PI)  
(CCF 0830289, renewal of CCR 039741) 09/08 - 09/11  
Supported by National Science Foundation (NSF), Arlington, VI. (\$277,370)
- Mobility-Assisted Routing in Mobile Networks (PI) (CNS 0626240) 09/06-09/09  
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- Outstanding Overseas Young Researcher Award (PI) 08/06 - present  
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- IEEE MASS 2006 Travel Grant (PI) 09/06-09/07  
National Science Foundation (NSF), Arlington, VI. (\$15,000)
- Acquisition of a NUMA-based Supercluster for High Performance Computing (PI)  
9/05 - 9/08.  
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- IEEE MASS 2006 Travel Grants (PI) 07/06-08/07  
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- Efficient and Localized Broadcasting in Ad-Hoc Wireless Networks (PI) 9/04 - 9/07.  
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- Wireless and Sensor Network Laboratory (CNS 0434533) (Co-PI) 8/04 - 8/07.  
Supported by National Science Foundation, Arlington, VA (CNS 0422762) (\$57,263)
- Secure Telecommunication Networks (Co-PI) 9/04 - 9/06.  
Supported by Defense Information Systems Agency (DISA) (\$ 300,000 out of  
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- Energy Efficient Communication in Sensor Networks (PI) 9/03 - 9/06.  
Supported by National Science Foundation, Arlington, VA (CCR 039741) (\$375,000)
- International Workshop on Theoretical and Algorithmic Aspects of Sensor, Ad-Hoc  
Wireless, and Peer-to-Peer Networks (PI) 10/03 - 10/04.  
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- Research Experiences for Undergraduates (REU) (PI) 5/03 - 5/04 Supported by  
National Science Foundation, Arlington, VA (\$11,650)
- A Theory of Fault-Tolerant Adaptive and Minimal Routing in Mesh-Connected Mul-  
ticomputers (PI) 4/99 - 4/03.  
Supported by National Science Foundation, Arlington, VA (CCR 9900646) (\$134,109)
- A Dominating-Set-Based Routing Scheme in Ad-Hoc Wireless Networks (PI) 6/00 -  
6/03.  
Supported by National Science Foundation, Arlington, VA (ANI 0073736) (\$181,957)

- A Low Cost Parallel and Distributed Systems Laboratory (PI) 9/01 - 9/04.  
Supported by National Science Foundation, Arlington, VA (EIA 0130806) (\$79,039)
- Research Experiences for Undergraduates (REU) (PI) 5/02 - 5/03 Supported by  
National Science Foundation, Arlington, VA (\$5,500)
- Implementation of Radio Service Software (PI) 1/97 - present.  
Supported by a grant from Motorola, Inc. Plantation, FL (\$1,898.255)
- Self-Organization Cluster-Tree Design in ns-2 platform (PI) 8/03 - 7/04.  
Supported by a grant Florida Communication Research Lab, Motorola, Inc. Plantation, FL (\$60,000)
- Software Path Coverage (PI) 1/03 - 12/03.  
Supported by a grant from Motorola, Inc. Plantation, FL (\$55,487)
- Computer System Evaluation (PI) 1/90-5/95.  
Supported by IBM, Boca Raton, FL (\$1,030,000)
- PI in 6 other sponsored research grants (a total of over \$400,000) funded by:
  - Motorola, Boynton Beach, FL (1997-1998)
  - South Florida Water Management District (1996-1998)
  - Florida High Tech. and Industry Council (1990-1991)
  - Alpine Engineered, FL (1999-2000)
  - Malema Corp., FL (2000-2001)
  - SIVA Corp., FL (2000-2001 and 2005-2006)
  - EDSS Corp., FL (2003-2003)

## 5 Instructional Experience

### 5.1 Graduate Level Courses (11, including 8 new courses)

Ad-Hoc Networks, Internet Routing Protocols, Design and Analysis of Parallel Algorithms, Distributed Algorithms, Distributed System Design, Formal Specification Methods, Introduction to Parallel Computers, Real-Time Software, Fault-Tolerant System Design, Concurrent Processing, and Analysis of Algorithms.

### 5.2 Undergraduate Level Courses (12 including one new course)

Design and Analysis of Algorithms, Data Structure and Algorithm Design Using C, Introduction to Computers, Data Structure and Algorithm Design Using C++, Introduction to Logic Design, Structured Computer Architecture, Switching Systems, Senior Project, Senior Seminar, Engineering Design II, Programming Methodologies (at Shanghai University), and Programming Language Pascal (at Shanghai University)

### 5.3 Theses and Dissertations

**(Ph.D. Dissertations: 14 completed and 4 in progress)**

- A. Srinivasan, “Secured Broadcasting in Mobile Ad-Hoc Networks,” (Summer 2008).  
(Assistant Professor at Bloomburg University of Pennsylvania, Pennsylvania)
- M. Lu, “Incentive Mechanisms in Mobile Ad-Hoc Networks,” (Summer 2008)  
(Lecturer at Central South University, P. R. China), (Summer 2008)
- S. Yang, “Connected Dominating Set (CDS) in Wireless Ad Hoc Networks: Variations with Applications,” (Fall 2007).  
(Post-doctor at Rensselaer Polytechnic Institute)
- B. Wu, “Key Management in Secured Ad-Hoc Networks,” (Fall 2006).  
(Assistant Professor at Fayetteville State University, North Carolina)
- X. Li, “Efficient Searching in Unstructured Peer-to-Peer Networks,” (Fall 2006).  
(Assistant Professor at The University of North Carolina at Pembroke, North Carolina)
- I. Jawhar, “Quality of Service Support in TDMA-Based Mobile Ad-Hoc Networks,” (Summer 2005).  
(Assistant Professor at United Arab Emirates University, UAE)
- F. Dai, “Localized Broadcasting in Ad-Hoc Wireless Networks,” (Summer 2005).  
(Assistant Professor at North Dakota State University, North Dakota)
- W. Lou, “Broadcasting in Ad-Hoc Wireless Networks,” (Summer 2004).  
(Assistant Professor at Hong Kong Polytechnic University, Hong Kong)
- Z. Jiang, “Fault-Tolerant Routing in Mesh-Connected Networks with Dynamic Faults,” (Summer 2002).  
(Tenured Associate Professor at West Chester University, Pennsylvania)
- X. Chen, “Fault-Tolerant Routing in 2-D and 3-D Meshes,” (Summer 1999).  
(Tenured Associate Professor at Texas State University, Texas)
- P. Goyal, “Cube-Connected-Cubes Multicomputers,” (Fall 1998).
- K. Huang, “The Balanced Hypercube and Its Applications,” (Summer 1997).
- Y. Wang, “A Uniform Hardware and Software Fault-Tolerant Model,” (Fall 1995).
- L. Brown, “Fault-Tolerant Distributed Shared Memories,” (Fall 1993).



- L. Cong, “Design and Implementation of Efficient Routing Protocols in Delay Tolerant Networks,” (in progress).
- F. Li, “Uncertainty-aware Reputation System in Mobile Networks: Analysis and Applications,” (in progress).
- J. Chen, “A New Privacy Model for Mobile Networking Applications,” (in progress)
- Y. Zhao, “Pub/Sub in Delay Tolerant Networks,” (in progress).

(MS Theses: **31 completed and 2 in progress**)

## 6 Professional Service

### 6.1 Membership Professional Societies

- Institute of Electrical and Electronics Engineering (IEEE): Computer Society (Fellow).
- Association for Computing Machinery (ACM) (Senior Member)
- Society for Computers and Their Applications (ISCA)
- Upsilon Pi Epsilon (UPE): Computing Science Honor Society

### 6.2 Editorial Board

- IEEE Transactions on Mobile Computing (2008-present)
- IEEE Transactions on Parallel and Distributed Systems, (2001-2005)
- IEEE Computer (Guest Editor, 02/2004)  
(special issue on “Ad-Hoc Networking”)
- Journal of Parallel and Distributed Computing (Guest Editor, 12/2004)  
(special issue on “Theoretical and Algorithmic Aspects of Sensor, Ad-Hoc Networks, and Peer-to-Peer Networks”)
- IEEE Transactions on Parallel and Distributed Systems (Guest Editor, 11/1999)  
(special issue on “Challenges in Designing Fault-Tolerant Routing in Networks”)
- Journal of Parallel and Distributed Computing (Guest Editor, 9/2001)  
(special issue on “Routing in Computer and Communication Networks”)
- IASTED International Journal of Computers and Applications (Co-Editor-in-Chief, 9/2003-present)
- International Journal of Security and Networks (IJSN) (1/2008-present)
- Journal of Interconnection Networks (1/2007-present)
- International Journal of High Performance Computing and Networking (IJHPCN) (9/2003-present)

- Journal of Computer Science and Technology (A publication of the Chinese Computer Federation, 9/2002-present)
- Ad-Hoc & Sensor Wireless Networks: An International Journal (AHSWN)(10/2004 - present)
- International Journal of Parallel, Emergent, and Distributed Systems (IJPEDS) (10/2004 - present)
- Journal of Pervasive Computing and Communications (JPCC) (9/2004- present)
- ISCA International Journal of Computers and Their Applications (Associate Editor in Networks and Protocols, 9/1999-12/2002)
- International Advisory Board, High Education Publishing Inc., China.

### 6.3 Conference Organization

1. Program Co-Chair: The 30th IEEE Conference on Computer Communications (INFOCOM'11), 2011.
2. Program Co-Chair: International Conference on Distributed Computing and Networking (ICDCN) 2010.
3. Panel Co-Chair: The 29th IEEE Conference on Computer Communications (INFOCOM'10), 2010.
4. General Co-Chair: International Conference on Distributed Computing in Sensor Systems (DCOSS), 2009.
5. Panel Co-Chair: ACM Annual International Conference on Mobile Computing and Networking (MobiCom), 2009.
6. Area TPC Chair: The 28th IEEE Conference on Computer Communications (INFOCOM'09), 2009.
7. General Chair: The 1st ACM International Workshop on Medical-grade Wireless Networks (WiMD 2009) (in conjunction with MobiHoc 2009).
8. General Chair: IEEE International International Parallel & Distributed Processing Symposium (IPDPS), 2008.
9. Executive Vice Program Chair: The 28th IEEE International Conference on Distributed Computing Systems (ICDCS), 2008
10. General Co-Chair: The International Conference on Wireless Algorithms, Systems and Applications (WASA), 2007.
11. General Co-Chair: The 5th International Symposium on Parallel and Distributed Processing and Applications (ISPA'07), 2007.
12. General Vice Chair: IEEE International International Parallel & Distributed Processing Symposium (IPDPS), 2007.

13. Program Co-Chair: Symposium on Advances in Internet, ChinaCom, 2007.
14. General Chair: The 3rd IEEE International Conference on Mobile Ad-Hoc and Sensor Systems (MASS), 2006.
15. Program Co-Chair: International Workshop on Networking, Architecture, and Storage, 2006.
16. General Vice Chair: The 2nd IEEE International Conference on Distributed Computing Sensor Systems (DCOSS), 2006.
17. General Chair: International Workshop on Wireless and Sensor Networks Security (WSNS'05) (in conjunction with MASS), 2005.
18. Program Co-Chair: The 1st International Workshop on Security and Mobility in Peer-to-Peer Systems (MPPS) (in conjunction with ICDCS), 2005.
19. Program Co-Chair: The 1st International Workshop on Ad-Hoc, Sensor and P2P Networks (AHSP) (in conjunction with ISADS), 2005.
20. Program Co-Chair: International Conference on Mobile Ad-Hoc and Sensor Networks (MSN), 2005.
21. Program Vice Chair: International Conference on Computer Networks and Mobile Computing (ICCNMC), 2005.
22. Program Chair: The 1st IEEE International Conference on Mobile Ad-Hoc and Sensor Systems (MASS), 2004.
23. General Co-Chair: The 2nd International Workshop on Mobile Distributed Computing (MDS), 2004.
24. Workshops Chair: The IEEE International Conference on Distributed Computing Systems (ICDCS), 2003.
25. General Co-Chair: The 7th International Conference on Computer Science and Informatics (ICS), 2003.
26. Program Co-Chair: The 4th and 5th Workshops on Advances in Parallel and Distributed Computational Models (in conjunction with IPDPS), 2002 and 2003.
27. Program Vice Chair: The 21th IEEE International Conference on Distributed Computing Systems (ICDCS), 2001.
28. Program Co-Chair: Workshop on Wireless Networks and Mobile Computing 2001 (in conjunction with ICPP 2001), 2001.
29. Program Vice Chair: The 29th International Conference on Parallel Processing (ICPP), 2000.
30. Program Co-Chair: The 12th ISCA International Conference on Parallel and Distributed Computing Systems (PDCS), 1999.

31. Local Arrangements Chair: The 5th IEEE International Symposium on High Performance Computer Architecture (HPCA), 1999.
32. Steering Committee Chair: The IEEE International Workshop on Wireless Security and Privacy (WiSP).
33. Steering Committee Chair: The IEEE International Workshop on Wireless and Sensor Networks Security (WSNS).
34. Advisory Committee: The 13th and 14th ISCA International Conference on Parallel and Distributed Computing Systems (PDCS), 2000 and 2001.
35. Advisory Committee: The 18th and 21st International Conference on Advanced Information Networking and Applications (AINA), 2004 and 2007.
36. Steering Committee: IEEE International Parallel & Distributed Processing Symposium (IPDPS)
37. Steering Committee: The 6th Workshop on Advances in Parallel and Distributed Computational Models (in conjunction with IPDPS), 2004.
38. Steering Committee: Workshop on Advances in Parallel and Distributed Computational Models (APDCM).
39. Steering Committee: International Symposium on Parallel and Distributed Processing and Application (ISPA).
40. Steering Committee: IEEE International Conference on Mobile Ad-Hoc and Sensor Systems (MASS).
41. Steering Committee: IEEE Symposium on Reliable Distributed Systems (SRDS).
42. Steering Committee: IEEE International Parallel & Distributed Processing Symposium (IPDPS).
43. Program Committee: IEEE International Conference on Network Protocols (ICNP), 2007 and 2008.
44. Program Committee: ACM International Symposium on Mobile Ad-Hoc Networking and Computing (MobiHoc), 2006 and 2007.
45. Program Committee: The 27th IEEE Symposium on Reliable Distributed System (SRDS-27), 2008.
46. Program Committee: The 5th Annual IEEE Communications Society Conference on Sensor, Mesh and Ad Hoc Communications and Networks (SECON), 2008 and 2009.
47. Program Committee: The 9th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM), 2008.
48. Program Committee: The International Conference on Parallel Processing (ICPP), 1999, 2000, 2001, 2002, 2004, 2006, and 2007.

49. Program Committee: The 16th, 18th, 20th, and 23rd International Conference on Distributed Computing Systems (ICDCS), 1996, 1998, 2000, 2001, and 2004.
50. Program Committee: The 23rd and 24th Annual Joint Conference of the IEEE Computer and Communications (INFOCOM), 2004 and 2005.
51. Program Committee: The 5th Annual IEEE International Conference on Pervasive Computing and Communications (PerCom), 2007
52. Program Committee: The IEEE Global Telecommunications Conference (GLOBECOM), 2004.
53. Program Committee: IEEE International Conference on Distributed Computing in Sensor Systems (DCOSS), 2005.
54. Program Committee: IEEE International Parallel and Distributed Processing Symposium (IPDPS), 2005.
55. Program Committee: The 10th Annual International Symposium on High Performance Computing (HPCA), 2003.
56. Organization Committee of over 100 other international conferences and workshops.

#### 6.4 Panels (3)

1. Panelist: Mobile Computing and Systems: Where is the Tofu?, *ACM MobiCom/MobiHoc*, 2007.
2. Panel Organizer: Network Systems in Challenging Environments: Hype or Reality, *IEEE INFOCOM*, 2008.
3. Panelist: Pervasive and Mobile Computing: Continued Challenges and Issues, *IEEE ICCCN*, 2008.

#### 6.5 NSF-related Activities

1. NSF Wireless Networks PI meeting, Chicago, July 2007.
2. NSF Workshops
  - Wireless Security, April 2008.
  - Mobility in Wireless Networks: Challenges and Opportunities, July 2007.
  - Bridging the Gap: Wireless Networking Technologies and Advances at the Physical Layer, August 2007.
3. Outreach/Site Visit (01/2007 - 12/2008)
  - Univ. of California at Los Angeles, Northeastern Univ., MIT, Harvard, George Washington Univ., Rutgers Univ., Univ. of California at Riverside, Univ. of Southern California, Indiana Univ. - Purdue Univ. Indianapolis, George Mason Univ., Univ. of Delaware, Univ. of Texas at Arlington, Stanford, and Univ. of California at Berkeley.

## 6.6 Professional Referee Service

**Proposals:** National Science Foundation (NSF)

**Journal papers:** IEEE Computer, IEEE Software, IEEE Parallel and Distributed Technology, IEEE Transactions on Software Engineering, IEEE Transactions on Computers, IEEE Transactions on Parallel and Distributed Systems, IEEE Transactions on Mobile Computing, ACM Transactions on Knowledge and Data Engineering, ACM Transactions on Computer Systems, ACM Computing Reviews, The Computer Journal, Distributed Computing, Discrete Applied Mathematics, Computer Networks and ISDN Systems, Journal of Parallel and Distributed Computing, Concurrency – Practice and Experience, Software – Practice and Experience, and many other journals.

**Conferences papers:** International Conference of the IEEE Computer and Communications (INFOCOM), ACM International Symposium on Mobile Ad-Hoc Networking and Computing (MobiHoc), IEEE International Conference on Pervasive Computing and Communications (PerCom), IEEE Global Telecommunications Conference (GLOBECOM), IEEE International Conference on Mobile Ad-Hoc and Sensor Systems (MASS), IEEE International Conference on Communications (ICC), IEEE Semi-annual Vehicular Technology Conference (VTC), IEEE International Conference on Distributed Computing in Sensor Systems (DCOSS), International Symposium on Fault-Tolerant Computing (FTCS), International Conference on Parallel Processing (ICPP), IEEE International Symposium on High-Performance Computer Architecture (HPCA), IEEE International Conference on Distributed Computing Systems (ICDCS), IEEE International Parallel and Processing Symposium (IPPS), IEEE International Symposium on Parallel and Distributed Processing (SPDP), IEEE International Parallel and Distributed Processing Symposium (IPDPS), IEEE Symposium on Reliable Distributed System (SRDS), IEEE International Computer Software and Applications Conference (COMPSAC), and many other conferences.

**Published Reviews of Books and Articles:** Five review articles for *ACM Computing Reviews*. One review article for *IEEE Computer*

## 6.7 IEEE Computer Society

Chairman: IEEE Technical Committee on Distributed Processing (12/05 - present)

## 6.8 University Service

Director of CSE Graduate Programs (9/1997-8/2002)

Department TA/GA Committee (Chair, 8/2002-present)

Department Personnel Committee (8/1999-present)

College Personnel Committee (8/2001-present, chair since 11/2005)

IEEE student advisor (9/1995-8/2002)

## 7 Professional Recognition

- Outstanding Overseas Young Researcher Award, National Natural Science Foundation of China (NSFC), China, 2006.
- Fulbright Senior Specialist, 12/2006-12/2010.
- Researcher of the Year (Full Professor level): Florida Atlantic University, 2006-2007.
- IEEE Distinguished Visitor: Computer Society, Sept. 1998 - Aug. 2001.
- IEEE Computer Society and ICDCS'03 Outstanding Service Award, May 2003.
- Concurrent Professor: Nanjing University, P. R. China, 1999 - present.
- Guest Professor: Shanghai Jiaotong University, Shanghai, China, 2002 - present.
- International Advisory Board: School of Electronics, Information and Electrical Engineering (SEIEE), Shanghai Jiaotong University, Shanghai, China, 2002 - present.
- Researcher of the Year (Full Professor level): Florida Atlantic University, 2001-2002.
- Researcher of the Year (Associate Professor level): Florida Atlantic University, 1996-1997.
- Distinguished Guest Lecturer: Department of Computer Science and Engineering, The Ohio State University, 2005.
- Outstanding Achievements Award: International Association of Science and Technology for Development (IASTED), 1998.