Ravi Prakash
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February 1, 2015

Educational History:

B. Tech., June 1990, Indian Institute of Technology, Delhi, India, Computer Science & Engineering.

M. S., December 1991, The Ohio State University, Columbus, Ohio 43210, Computer & Information Science.

Ph. D., August 1996, The Ohio State University, Columbus, Ohio 43210, Computer & Information Science.
   Dissertation Title: Fault-tolerant resource management in mobile computing systems.
   Advisor: Dr. Mukesh Singhal.

Employment History - principal positions since the Bachelor's degree:

- *Professor,* September 2012 - present, University of Texas at Dallas.

- *Associate Professor,* August 2001 - August 2012, University of Texas at Dallas.

- *Assistant Professor,* July 1997 – August 2001, University of Texas at Dallas.

- *Visiting Assistant Professor,* September 1996 – June 1997, University of Rochester.

- *Presidential Fellow,* January 1996 – August 1996, The Ohio State University.

- *Graduate Teaching/Research Associate,* September 1990–December 1995, Department of Computer and Information Science, The Ohio State University.

Employment History - other positions since the Bachelor's degree:

- Visiting Researcher, summer of 2003, 2005, 2006 and 2007, Swiss Federal Institute of Technology, Lausanne (EPFL).

Professional recognitions, honors, memberships:

- *Excellence in Teaching award, 2011-2012*, Department of Computer Science, Erik Jonsson School of Engineering and Computer Science, University of Texas at Dallas.

- *Excellence in Teaching Bonus:* Erik Jonsson School of Engineering and Computer Science, 2011.

- *Certificate of Achievement*: for continuous exemplary contributions to Ph.D. education and research in the Erik Jonsson School of Engineering and Computer Science, U.T. Dallas, September 2006.

- *Outstanding Service Award*, Erik Jonsson School of Engineering and Computer Science, U.T. Dallas, September 2006.

- *Best Paper Award*, Software Technology Track, Hawaii International Conference on System Sciences, January 2006.

- Appointed Associate Editor, IEEE Transactions on Mobile Computing, August 2005.

- *CAREER Award*, National Science Foundation, 2001-2006.

- *Nominee: Chancellor's Council Outstanding Teacher award, 1999-2000, 2000-2001*, University of Texas at Dallas.

- *Excellence in Teaching award, 1999-2000, 2001-2002*, Department of Computer Science, Erik Jonsson School of Engineering and Computer Science, University of Texas at Dallas.

- *Selected among top three papers, 1999*, Mobility in Databases and Distributed Systems Workshop (MDDS-DEXA'99), Florence, Italy, August 30–September 3, 1999. To be published in ACM/Baltzer Mobile Networks and Applications (MONET) journal.

- *Selected among best five papers, 1999*, International Workshop on Discrete Algorithms and Methods for Mobile Computing and Communications (DIALM), Seattle, August 20, 1999.

- *Best Paper, 1998*, Eighteenth International Conference on Distributed Computing Systems (ICDCS'98), Amsterdam, The Netherlands, May 26–29, 1998 (in a five-way tie for best paper), Institute of Electrical and Electronic Engineers (IEEE).

- *Presidential Fellowship, 1996*, The Ohio State University. Awarded to doctoral students judged to have outstanding research ability and promise.

- *Outstanding Paper Award, 1994*, The International Symposium on Parallel Architectures, Algorithms, and Networks (ISPAN), Kanazawa, Japan, December 1994.

- *The Best B.Tech. Major Project Award, 1990*, award given to the best project in the Department of Computer Science and Engineering, Indian Institute of Technology, Delhi. Implemented a fault-tolerant file system with disk-mirroring.

Professional memberships:

- Senior Member, Insitute of Electrical and Electronics Engineers (IEEE): May 2010 - present.

- Member, IEEE: 1996 - 2010.

- Student Member, IEEE: 1992 - 1996.

Scholarly and creative activity:

Articles published in refereed journals:

1. "Proactive Resource Allocation Optimization in LTE with Inter-Cell Interference Coordination."
   M. Brehm and R. Prakash.
   Wireless Networks, Elsevier, Volume 20, Issue 5, Pages 945–960, July 2014.

2. "60 GHz Wireless Links in Data Center Networks."
   H. Vardhan, S.-R. Ryu, B. Banerjee and R. Prakash.
   Computer Networks Journal, Elsevier, Volume 58, Pages 192–205, January 2014.

3. "CHAMELEON: A Framework for Coexistence of Wireless Technologies in an Unlicensed Band."
   Q. Javed and R. Prakash.
   Wireless Personal Communications, Springer, 32 pages, to appear: available online December 2013.

4. "An Empirical Evaluation of Lightweight Random Walk based Routing Protocol in Duty Cycle Aware Wireless Sensor Networks."
   A.N. Mian, M.F. Raja, R. Khan and R. Prakash.
   To appear in *The Scientific World Journal*, Hindawi Publishing Corporation (accepted on December 5, 2013).

5. "Continuous Active Phase Shifter Design and Analysis for Millimeter-Wave Circuits."
   S.-R. Ryu, H. Vardhan, B. Banerjee and R. Prakash
   IEEE Transactions on Circuits and Systems II: Express Briefs, Volume 60, Number 10, Pages 627–631, October 2013.

6. "Overload-State Downlink Resource Allocation in LTE MAC Layer."
   M. Brehm and R. Prakash.
   Wireless Networks, Elsevier, Volume 19, Number 5, Pages 913–931, July 2013.

7. "Emulation of Multipath Effects on a Wireless Testbed and its Impact on MAC Layer Performance."
V. Shivamurthy and R. Prakash.
Wireless Networks - The Journal of Mobile Communication, Computation and Information, Springer, Volume 18, Number 4 (2012), Pages 457–468.

8. "Parallel and Gaussian frequency hopping for dynamic coexistence in the unlicensed band."
M.M. Hasan, R. Prakash and J.P. Jue.
International Journal of Communication Systems, John Wiley & Sons, Volume 24, Number 9, Pages 1163–1182, September 2011.

9. "The Impact of Mobility on the Time Complexity for Deterministic Broadcasting in Radio Networks."
R. Prakash, Y. Sasson, M. Mohsin, D. Cavin and A. Schiper.
International Journal on Ad Hoc and Ubiquitous Computing, Inderscience Enterprises, Volume 8, Number 3, Pages 174–188, 2011.

10. "A Biased Random Walk Routing Protocol for Wireless Sensor Networks: the Lukewarm Potato Protocol."
Roberto Beraldi, Roberto Baldoni and Ravi Prakash.
IEEE Transactions on Mobile Computing, Volume 9, Number 11, Pages 1649-1661, November 2010.

11. "Time-efficient Distributed Layer-2 Auto-configuration for Cognitive Radio Networks."
S. Krishnamurthy, M. Thoppian, S. Kuppa, R. Chandrasekaran, N. Mittal, S. Venkatesan and R. Prakash.
Computer Networks Journal: Special Issue on Cognitive Radio Networking, Elsevier Publications, Volume 52, Issue 4, Pages 831-849, 2008.

12. "Link Scheduling in Wireless Sensor Networks: Distributed Edge-Coloring Revisited."
S. Gandham, M. Dawande and R. Prakash.
Journal of Parallel and Distributed Computing, Elsevier Publications, Volume 68, Issue 8, Pages 1122-1134, August 2008.

13. "Variable Power Broadcast using Local Information in Ad Hoc Networks."
A. Chiganmi, M. Baysan, K. Sarac and R. Prakash.
Ad Hoc Networks Journal, Elsevier Publications, Volume 6, Number 5, Pages 675–695, July 2008 .

14. "A Distributed Protocol for Dynamic Address Assignment in Mobile Ad Hoc Networks."
M. Thoppian and R. Prakash.
IEEE Transactions on Mobile Computing, Volume 5, Number 1, January 2006.

15. "Causality and Spatial-Temporal Ordering of Events in Mobile Systems."
R. Prakash and R. Baldoni.
ACM/Kluwer Journal on Mobile Networks and Applications (MONET), Volume 9, Number 5, Pages 507–516, October 2004.

16. "Distributed Wireless Channel Allocation in Networks with Mobile Base Stations.
S. Nesargi and R. Prakash.
IEEE Transactions on Vehicular Technology, Volume 51, Number 6, Pages 1407–1421, November 2002.

17. "A Routing Algorithm for Wireless Ad Hoc Networks with Unidirectional Links."
R. Prakash.
ACM/Baltzer Wireless Networks (WINET) Journal, Volume 7, Number 6, Pages 617-626, November 2001.

18. "Load-Balanced Location Management for Mobile Systems using Quorums and Dynamic Hashing."
R. Prakash, Z. Haas, and M. Singhal.
ACM/Baltzer Wireless Networks (WINET) Journal, Volume 7, Number 5, Pages 497-512, September 2001.

19. "A Feedback Based Scheme for Improving TCP Performance in Ad Hoc Networks."
K. Chandran, S. Raghunathan, S. Venkatesan, and R. Prakash.
IEEE Personal Communication Systems (PCS) Magazine: special issue on Ad Hoc Networks, Volume 8, Number 1, Pages 34–39, February 2001.

20. "Aggressive Error Recovery for TCP over Wireless Links."
E.A. Qaddoura, R. Prakash, and L. Tamil.
Integrated Computer-Aided Engineering Journal (special issue on Distributed Computing and Networks), CRC Press, Pages 287–296, July 2000.

21. "Distributed Dynamic Fault-Tolerant Channel Allocation for Mobile Computing."
R. Prakash, N. G. Shivaratri, and M. Singhal.
IEEE Transactions on Vehicular Technology, Volume 48, Number 6, Pages 1874–1888, November 1999.

22. "Designing Communication Strategies for Heterogeneous Parallel Systems."
R. Prakash and D. K. Panda.
Parallel Computing, Elsevier Science Publishers, Volume 24, Pages 2035–2052, 1998.

23. "Slotted-FIFO Communication for Asynchronous Distributed Systems."
R. Baldoni, R. Beraldi and R. Prakash.
Computer Journal, Volume 41, Number 5, Pages 337–348, 1998.

24. "Efficient Delta-Causal Broadcasting."
R. Baldoni, R. Prakash, M. Raynal, and M. Singhal.
International Journal of Computer Systems Science and Engineering, Volume 13, Number 5, Pages 263–271, September 1998.

25. "Dependency Sequences and Hierarchical Clocks: Efficient Alternatives to Vector Clocks for Mobile Computing Systems."
R. Prakash and M. Singhal.
ACM/Baltzer Journal on Wireless Networks, Volume 3, Number 5, Pages 349–360, October 1997.

26. "An Adaptive Causal Ordering Algorithm Suited to Mobile Computing Environments."
R. Prakash, M. Raynal, and M. Singhal.
Journal of Parallel and Distributed Computing, Volume 41, Number 2, Pages 190–204, March 1997.

27. "Simplices by Point-Sliding and the Yamnitsky-Levin Algorithm."
U. Faigle, M. Hunting, W. Kern, R. Prakash, and K. J. Supowit.
Mathematical Methods of Operations Research, Volume 46, No. 1, Pages 131–142, 1997.

28. "Low-Cost Checkpointing and Failure Recovery in Mobile Computing Systems."
R. Prakash and M. Singhal.
IEEE Transactions on Parallel and Distributed Systems, Pages 1035–1048, October 1996.

Articles published in refereed conference proceedings:

1. "Wirless Networking Testbed and Emulator (WiNeTestEr)."
K.S. Subramani, J.D. Beshay, N. Mahabaleshwar, E. Nourbakhsh, B. McMillin, B. Banerjee, R. Prakash, Y. Du, P. Huang, T. Xi, Y. You, J.D. Camp, P. Gui, D. Rajan and J. Chen.
Proceedings of the Seventeenth ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWiM 2014), Montreal, Canada, September 2014.

2. "Improving the Performance of Multipath TCP over Heterogeneous Paths using Slow Path Adaptation."
S. H. Baidya and Ravi Prakash.
Proceedings of the IEEE International Conference on Communications (ICC 2014), Sydney, Australia, June 2014.

3. "Concurrency in Polygonally Arranged Wireless Data Centers with All Line-of-Sight Links."
H. Vardhan and R. Prakash.
In *Proceedings of the International Conference on Computing, Networking and Communications (ICNC 2014),* Honolulu, Hawaii, February 2014.

4. "ATR-MAC: Deadline Driven Data Collection from Smart Meters in Absence of Aggregation."
   E. Nourbakhsh and R. Prakash.
   In *Proceedings of the Sixteenth ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWiM 2013),* Barcelona, Spain, November 2013.

5. "Towards 60 GHz Wireless Switching Interconnect."
   H. Vardhan and R. Prakash.
   In *Proceedings of the International Conference on Computing, Networking and Communications (ICNC 2013),* San Diego, California, January 2013.

6. "Exploring Alternatives to Channel Change for Improving the Coexistence of IEEE 802.15.4 and IEEE 802.11."
   Q. Javed and R. Prakash.
   In *Proceedings of the Eighth International Conference on Mobile Ad Hoc and Sensor Networks (MSN 2012),* Chengdu, China, December 2012.

7. "Improving the Performance of Hybrid Wireless Mesh Protocol."
   Q. Javed and R. Prakash.
   In *Proceedings of the Eighth International Conference on Mobile Ad Hoc and Sensor Networks (MSN 2012),* Chengdu, China, December 2012.

8. "Enhancing ASSERT: Making an Accurate Testbed Friendly."
   E. Nourbakhsh, R. Burchfield, S. Venkatesan, N. Mittal and R. Prakash.
   In *Proceedings of the Sixth ACM International Workshop on Wireless Network Testbeds, Experimental Evaluation and Characterization (WiNTECH 2011: MobiCom Workshop),* Las Vegas, September 2011.

9. "Gradient-based Aggregation in Forest of Sensors (GrAFS)."
   R. Prakash and E. Nourbakhsh.
   In *Proceedings of the 40th International Conference on Parallel Processing (ICPP 2011),* September 2011.

10. "FREEZE: Rate Adaptation in Wireless LANs using channel contention estimates."
    A. Kulkarni, S. Menezes and R. Prakash.
    In *Proceedings of the Third International Conference on COMmunication Systems and NETworkS (COMSNETS 2011),* Bangalore, India, January 2011.

11. "Wireless Data Center with Millimeter Wave Network."
    H. Vardhan, N. Thomas, S.-R. Ryu, B. Banerjee and R. Prakash.
    In *Proceedings of IEEE Globecom,* Miami, December 2010.

12. "ASSERT: A Wireless Networking Testbed."
    E. Nourbakhsh, J. Dix, P. Johnson, R. Burchfield, S. Venkatesan, N. Mittal and R. Prakash.
    In *Proceedings of The Sixth International Conference on Testbeds and Research Infrastructures for the Development of Networks and Communities (TridentCom 2010),* Berlin, Germany, May 2010.

13. "Demo Abstract: ASSERT - Advanced Wireless Environment Research Testbed."
    P. Johnson, E. Nourbakhsh, R. Burchfield, J. Dix, R. Prakash, S. Venkatesan and N. Mittal.
    In *Proceedings of the Seventh ACM Conference on Embedded Networked Sensor Systems (SenSys '09), 2-page abstract,* Berkeley, California, November 2009.

14. "Data Aggregation in Sensor Networks: No More a Slave to Routing."
    Ravi Prakash, Ehsan Nourbakhsh and Kunal Sahu.
    In *Proceedings of the Forty-Seventh Annual Allerton Conference,* Allerton House, UIUC, Illinois, USA, October 2009.

15. "FAROES: Fairness And Reliability using Overlay Expenseless Set-out for duty-cycle optimization in WSN."
    Roberto Baldoni, Silvia Bonomi, Yann Busnel, and Ravi Prakash.
    In *Proceedings of the ISCA Twenty-Second International Conference on Parallel and Distributed Computing and Communication Systems (PDCCS-2009),* Louisville, Kentucky, USA, September 2009.

16. "*Lukewarm Potato* Forwarding: A Biased Random Walk Routing Protocol for Wireless Sensor Networks."
Roberto Beraldi, Roberto Baldoni and Ravi Prakash.
In *Proceedings of The Sixth Annual IEEE Communications Society Conference on Sensor, Mesh and Ad Hoc Communications and Networks - SECON 2009*, Rome, Italy, June 2009.

17. "RF in the Jungle: Effect of Environment Assumptions on Wireless Experiment Repeatability."
R. Burchfield, E. Nourbakhsh, J. Dix, K. Sahu, S. Venkatesan and R. Prakash.
In *Proceedings of IEEE International Conference on Communications (ICC),* Dresden, Germany, June 2009.

18. "Dynamic Coexistence of Frequency Hopping Networks using Parallel and Gaussian Allocations."
M. M. Hasan, Ravi Prakash, and Jason P. Jue.
In *Proceedings of IEEE International Conference on Communications (ICC),* Dresden, Germany, June 2009.

19. "Extending Paxos/LastVoting with an Adequate Communication Layer for Wireless Ad hoc Networks."
F. Borran, R. Prakash and A. Schiper.
Proceedings of the 27th IEEE Symposium on Reliable Distributed Systems, Naples, Italy, October 2008.

20. "A Unified Framework of Node Mobility Models."
N. Choi, A. Mahdian, R. Prakash, S. Venkatesan, N. Mittal, J. Anderson, E. Redding, and R. Butler.
Proceedings of Military Communications Conference, October 2007.

21. "CSMA-based MAC Protocol for Cognitive Radio Based Multi-hop Wireless Networks."
M. Thoppian, S. Venkatesan and R. Prakash.
Proceedings of the IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM), June 2007.

22. "Improving Performance of Parallel Simulation Kernel for Wireless Network Simulations."
M. Thoppian, S. Venkatesan, H. Vu, R. Prakash, N. Mittal and J. Anderson.
Proceedings of MILCOM-2006, October 2006.

23. "Real-time Simulations of Mobile Ad Hoc Networks (MANET) in OPNET Modeler."
H. Vu, M. Thoppian, A. Mahdian, S. Venkatesan, R. Prakash and J. Anderson.
Proceedings of OPNETWORK 2006, August 2006.

24. "MAC-layer Scheduling in Cognitive Radio based Multi-hop Wireless Networks."
M. Thoppian, S. Venkatesan, R. Prakash and R. Chandrasekaran.
Proceedings of IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM), June 26-29, 2006.

25. "Variable Power Broadcasting in Ad Hoc Networks."
A. Chiganmi, K. Sarac and R. Prakash.
Proceedings of IEEE International Conference on Communications (ICC'06), June 2006.

26. "One-dimensional discrete time Markov chain for performance evaluation of IEEE 802.11 DCF scheme."
S. Kuppa, R. Prakash and S.-C. Niu.
Proceedings of IEEE Vehicular Techology Conference (VTC), May 2006.

27. "Reliable Broadcast in Wireless Mobile Ad Hoc Networks."
M. Mohsin, D. Cavin, Y. Sasson, R. Prakash and A. Schiper.
Proceedings of the Hawaii International Conference on System Sciences (HICSS'06), January 2006.

28. "Hop-Constrained Energy-Aware Routing in Wireless Sensor Networks."
S.R. Gandham, M. Dawande and R. Prakash.
Proceedings of the IEEE Globecom conference, November, 2005.

29. "Time-efficient layer-2 auto-configuration for cognitive radios."
S. Krishnamurthy, M. Thoppian, S. Kuppa, R. Chandrasekaran, S. Venkatesan, N. Mittal and R. Prakash.
Proceedings of the IASTED International Conference on Parallel and Distributed Computing and Systems (PDCS),, Phoenix, Arizona, November 14-16, 2005.

30. "SAN: Smart Ad hoc Networks."
    S.R. Gandham, S. Kuppa and R. Prakash.
    Proceedings of the IEEE Vehicular Technology Conference (VTC), Fall 2005.

31. "Control Channel based MAC Layer Configuration, Routing and Situation Awareness for Cognitive Radio Networks."
    S. Krishnamurthy, M. Thoppian, S. Venkatesan and R. Prakash.
    Proceedings of MILCOM 2005, Atlantic City, New Jersey, October 2005.

32. "Link Scheduling in Sensor Networks: Distributed Edge Coloring Revisited."
    S.R. Gandham, M. Dawande and R. Prakash.
    Proceedings of IEEE Infocom 2005, March 2005.

33. "Adaptive IEEE 802.11 DCF Scheme with Knowledge-based Backoff."
    S. Kuppa and R. Prakash.
    Proceedings of the IEEE Wireless Communications and Networking Conference (WCNC), March 2005.

34. "Undesirable service differentiation in future WLANs (short paper)."
    S. Kuppa, S.R. Gandham and R. Prakash.
    Proceedings of the First International Conference on Quality of Service in Heterogeneous Wired/Wireless Networks (QShine), pp 304–307, October 2004.

35. "A QoS aware MAC layer protocol for Wireless LANs."
    N. Choi, S. Venkatesan and R. Prakash.
    Proceedings of the International Workshop on Mobile and Wireless Networking (MWN 2004), August 2004.

36. "An Integral Flow-Based Energy-Efficient Routing Algorithm for Wireless Sensor Networks."
    S.R. Gandham, M. Dawande and R. Prakash.
    Proceedings of IEEE Wireless Communications and Networking Conference (WCNC), March 2004.

37. "Service Differentiation Mechanisms for IEEE 802.11-based Wireless Networks."
    S. Kuppa and R. Prakash.
    Proceedings of IEEE Wireless Communications and Networking Conference (WCNC), March 2004.

38. "Energy-Efficient Schemes for Wireless Sensor Networks with Multiple Mobile Base Stations."
    S.R. Gandham, M. Dawande, R. Prakash and S. Venkatesan.
    Proceedings of IEEE Globecom, December 2003.

39. "Reliable Multicast in Mobile Networks."
    R. Prakash, A. Schiper and M. Mohsin.
    Proceedings of IEEE Wireless Communications and Networking Conference (WCNC), March 2003.

40. "IP Address Assignment in a Mobile Ad Hoc Networks."
    M. Mohsin and R. Prakash.
    Proceedings of MILCOM, September 2002, IEEE.

41. "MANETconf: Configuration of Hosts in a Mobile Ad Hoc Network."
    S. Nesargi and R. Prakash.
    Proceedings of INFOCOM, June 2002, IEEE.

42. "Effect of Availability Factor Threshold and Clustering Gap on Performance of Clustering Mechanisms for Multi-cluster Mobile Ad Hoc Networks."
    A.A. Siddiqui and R. Prakash.
    Proceedings of ICC, March 2002, IEEE.

43. "Issues Pertaining to Service Discovery in Mobile Ad Hoc Networks."
    S. Nesargi and R. Prakash.
    Proceedings of ACM Workshop on Principles of Mobile Computing (POMC), August 2001.

44. "Issues in Message Passing for a Tele-Immersive Experience."
    R. Prakash.
    Proceedings of Sixth International Workshop on Object-oriented Real-time Dependable Systems (WORDS'01), Rome, January 8-10, 2001.

45. "A Tunneling Approach to Routing with Unidirectional Links in Mobile Ad-Hoc Networks."
    S. Nesargi and R. Prakash.
    Proceedings of the IEEE International Conference on Computer Communications and Networks (ICCCN), Las Vegas, October 16-18, 2000.

46. "Effects of Link Stability and Directionality of Motion on Routing Algorithms in MANETs."
    A. Kamat and R. Prakash.
    Proceedings of the IEEE International Conference on Computer Communications and Networks (ICCCN), Las Vegas, October 16-18, 2000.

47. "Max-Min D-Cluster Formation in Wireless Ad Hoc Networks."
    A. Amis, R. Prakash, D.T. Huynh and T. Vuong.
    Proceedings of the IEEE INFOCOM-2000 Conference, Tel Aviv, Israel, March 26-30, 2000.

48. "Load-Balancing Clusters in Wireless Ad Hoc Networks."
    A. Amis, and R. Prakash.
    Proceedings of the 3rd IEEE Symposium on Application-Specific Systems and Software Engineering Technology (ASSET 2000), Richardson, Texas, March 24-25, 2000.

49. "Gateway Routing: A Cluster Based Mechanism for Recovery from Mobile Host Partitioning in Cellular Networks."
    S. Raghunathan, S. Venkatesan, and R. Prakash.
    Proceedings of the 3rd IEEE Symposium on Application-Specific Systems and Software Engineering Technology (ASSET 2000), Richardson, Texas, March 24-25, 2000.

50. "Modifications to TCP for Improved Performance and Reliable End-to-End Communication in Wireless Networks."
    R. Prakash and M. Sahasrabudhe.
    Proceedings of IEEE Wireless Communications and Networking Conference (WCNC'99), New Orleans, September 21–24, 1999.

51. "Information Dissemination in Partitionable Mobile Ad Hoc Networks."
    G. Karumanchi, S. Muralidharan and R. Prakash.
    Proceedings of the IEEE Symposium on Reliable Distributed Systems (SRDS'99), Lausanne, Switzerland, Pages 4–13, October 19–22, 1999.

52. "Causality and the Spatial-Temporal Ordering of Events in Mobile Systems."
    R. Prakash and R. Baldoni.
    Proceedings of the 2nd International Workshop on Mobility in Databases and Distributed Systems (part of the 10th International Conference and Workshops on Database and Expert Systems Applications), August 30–Sep 3, Florence, Italy.

53. "Unidirectional Links Prove Costly in Wireless Ad Hoc Networks."
    R. Prakash.
    Proceedings of the Workshop on Discrete Algorithms and Methods for Mobile Computing and Communications (DIAL-M'99), Seattle, Pages 15–22, August 20, 1999.

54. "Routing in LEO-Based Satellite Networks."
    V.V. Gounder, R. Prakash and H. Abu-Amara.
    Proceedings of IEEE Emerging Technologies Symposium on Wireless Communications and Systems, Richardson, Pages IX.9–IX.14, April 1999.

55. "Distributed Wireless Channel Allocation in Networks with Mobile Base Stations."
    S. Nesargi and R. Prakash.
    Proceedings of IEEE INFOCOM'99, New York, Pages 592–600, March 1999.

56. "Impact of Unidirectional Links on Wireless Ad-Hoc Networks."
    R. Prakash and M. Singhal.
    Proceedings of the DIMACS Workshop on Mobile Networking and Computing, Rutgers University, March 1999.

57. "Architecture for Group Communication in Mobile Systems."
    R. Prakash and R. Baldoni.
    Proceedings of the IEEE Symposium on Reliable Distributed Systems (SRDS), West Lafayette, Pages 235–242, October 20–23, 1998.

58. "A Feedback Based Scheme For Improving TCP Performance in Ad-Hoc Wireless Networks."
    K. Chandran, S. Raghunathan, S. Venkatesan and R. Prakash.
    Proceedings of the 18th International Conference on Distributed Computing Systems (ICDCS), Amsterdam, Pages 472–479, May 26–29, 1998.

59. "Fault-Tolerant Mobility Planning For Rapidly Deployable Wireless Networks."
    C. Shields, Jr., V. Jain, S. Ntafos, R. Prakash and S. Venkatesan.
    Proceedings of IEEE Workshop on Fault-Tolerant Parallel and Distributed Systems (Springer-Verlag LNCS), Orlando, April 3, 1998.

60. "Dynamic Hashing + Quorum = Efficient Location Management for Mobile Computing Systems."
    R. Prakash and M. Singhal.
    Proceedings of ACM Symposium on Principles of Distributed Computing (PODC), Santa Barbara, Page 291, August 1997 (short presentation).

61. "Flexible General Purpose Communication Primitives for Distributed Systems."
    R. Baldoni, R. Beraldi and R. Prakash.
    Proceedings of the 6th Conference on High Performance Distributed Computing (HPDC), Portland, Pages 201–210, August 1997.

62. "Distributed Wireless Channel Allocation in Cellular Systems with Mobile Base Stations."
    R. Prakash.
    Workshop on Nomadic Computing (satellite workshop of IPPS'97), Geneva, April 5, 1997.

63. "Broadcast with Time and Causality Constraints for Multimedia Applications."
    R. Baldoni, R. Prakash, M. Raynal, and M. Singhal.
    Proceedings of the 23rd EUROMICRO Conference (IEEE Society Press), Prague, Czech Republic, Pages 617–626, September 2–5, 1996.

64. "A Dynamic Approach to Location Management in Mobile Computing Systems."
    R. Prakash and M. Singhal.
    Proceedings of the 8th International Conference on Software Engineering and Knowledge Engineering (SEKE'96), Lake Tahoe, Nevada, Pages 488–495, June 10–12, 1996.

65. "Modeling and Analysis of Channel Transferability in Mobile Computing Environments."
    R. Prakash and M. Singhal.
    Proceedings of the International Conference on Parallel and Distributed Systems (ICPADS), Tokyo, Japan, Pages 198–205, June 4–6, 1996.

66. "An Efficient Causal Ordering Algorithm for Mobile Computing Environments."
    R. Prakash, M. Raynal, and M. Singhal.
    Proceedings of the 16th International Conference on Distributed Computing Systems (ICDCS), Hong Kong, Pages 744–751, May 28–30, 1996.

67. "Efficient Delta-Causal Broadcasting for Multimedia Applications."
    R. Baldoni, R. Prakash, M. Raynal, and M. Singhal.
    Proceedings of the 15th ACM Symposium on Principles of Distributed Computing (PODC), Philadelphia, Page 89 (short presentation), May 24–26, 1996.

68. "Distributed Dynamic Channel Allocation for Mobile Computing."
    R. Prakash, N. G. Shivaratri and M. Singhal.
    Proceedings of the 14th ACM Symposium on Principles of Distributed Computing (PODC), Ottawa, Canada, Pages 47–56, August 21–23, 1995.

69. "Architectural Issues in Designing Heterogeneous Parallel Systems with Passive Star-Coupled Optical Interconnection."
    R. Prakash and D. K. Panda.
    Proceedings of the International Symposium on Parallel Architectures, Algorithms, and Networks (ISPAN), Kanazawa, Japan, Pages 246–253, December 14–16, 1994.

70. "Maximal Global Snapshot with Concurrent Initiators."
    R. Prakash and M. Singhal.
    Proceedings of the 6th IEEE Symposium on Parallel and Distributed Processing (SPDP), Dallas, Texas, Pages 344–351, October 26–29, 1994.

71. "On the Relative Speed of Messages and Hierarchical Channels."
    M. Ahuja and R. Prakash.
    Proceedings of the 4th IEEE Symposium on Parallel and Distributed Systems (SPDP), Arlington, Texas, Pages 246–253, December 1992.

Other Publications

1. "The First Telecommunications Engineering Program in the United States."
   G.O. Burnham, C.D. Cantrell, A. Farago, A. Fumagalli, K. Kiasaleh, W.P. Osborne, and R. Prakash.
   Journal of Engineering Education, Pages 653–657, October, 2001.

2. "Education: Mobile Computing."
   R. Prakash.
   IEEE Distributed Systems Online, Volume 2, Number 6, 2001.

U.S. Patent awarded:

- "Clusterhead selection in wireless ad hoc networks."
  A.D. Amis and R. Prakash (inventors); Board of Regents, the University of Texas System (assignee).
  U.S. Patent No. 6,829,222 (December 7, 2004).

Invited and refereed talks/presentations to professional meetings and seminar or colloquia assemblies:

1. "ATR-MAC: Deadline Driven Data Collection from Smart Meters in Absence of Aggregation."
   Sixteenth ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWiM 2013), Barcelona, Spain, November 2013.

2. "Exploring Alternatives to Channel Change for Improving the Coexistence of IEEE 802.15.4 and IEEE 802.11."
   Eighth International Conference on Mobile Ad Hoc and Sensor Networks (MSN 2012), Chengdu, China, December 2012.

3. "Improving the Performance of Hybrid Wireless Mesh Protocol."
   Eighth International Conference on Mobile Ad Hoc and Sensor Networks (MSN 2012), Chengdu, China, December 2012.

4. "White House/NITRD Wireless Spectrum Research and Development Workshop": panelist.
   Boulder, Colorado, July 2011.

5. "Gradient-based Aggregation in Forest of Sensors (GrAFS)."
   International Conference on Parallel Processing (ICPP), Taiwan, September 2011.

6. "Wireless Data Center with Millimeter Wave Network."
   IEEE Globecom, Miami, December 2010.

7. "Data Aggregation in Sensor Networks: No More a Slave to Routing."
   Forty-Seventh Annual Allerton Conference, Allerton House, UIUC, Illinois, USA, October 2009.

8. "*Lukewarm Potato* Forwarding: A Biased Random Walk Routing Protocol for Wireless Sensor Networks."
   The Sixth Annual IEEE Communications Society Conference on Sensor, Mesh and Ad Hoc Communications and Networks - SECON 2009, Rome, Italy, June 2009.

9. "RF in the Jungle: Effect of Environment Assumptions on Wireless Experiment Repeatability."
   IEEE International Conference on Communications (ICC), Dresden, Germany, June 2009.

10. "Dynamic Coexistence of Frequency Hopping Networks using Parallel and Gaussian Allocations."
    IEEE International Conference on Communications (ICC), Dresden, Germany, June 2009.

11. "CSMA-based MAC Protocol for Cognitive Radio Based Multi-hop Wireless Networks."
    IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM), June 2007.

12. "Reliable Broadcast in Wireless Mbile Ad Hoc Networks."
    Hawaii International Conference on System Sciences (HICSS'06), Kauai, Hawaii, January 2006.

13. "Effect of Availability Factor Threshold and Clustering Gap on Performance of Clustering Mechanisms for Multi-cluster Mobile Ad Hoc Networks."
    R. Prakash.
    ICC 2002, New York, March 2002.

14. "Issues in Message Passing for a Tele-Immersive Experience."
    R. Prakash.
    Sixth International Workshop on Object-oriented Real-time Dependable Systems (WORDS'01), Rome, January 8-10, 2001.

15. "A Tunneling Approach to Routing with Unidirectional Links in Mobile Ad-Hoc Networks."
    IEEE International Conference on Computer Communications and Networks (ICCCN), Las Vegas, October 16-18, 2000.

16. "Effects of Link Stability and Directionality of Motion on Routing Algorithms in MANETs."
    IEEE International Conference on Computer Communications and Networks (ICCCN), Las Vegas, October 16-18, 2000.

17. "Load-Balancing Clusters in Wireless Ad Hoc Networks."
    Third IEEE Symposium on Application-Specific Systems and Software Engineering (ASSET 2000), Richardson, March 24–25, 2000.

18. "Information Dissemination in Partitionable Mobile Ad Hoc Networks."
    IEEE Symposium on Reliable Distributed Systems (SRDS'99), Lausanne, Switzerland, October 19–22, 1999.

19. "Unidirectional Links Prove Costly in Wireless Ad Hoc Networks."
    Workshop on Discrete Algorithms and Methods for Mobile Computing and Communications (DIAL-M'99), Seattle, August 1999.

20. "Routing in LEO-Based Satellite Networks."
    IEEE Emerging Technologies Symposium on Wireless Communications and Systems, Richardson, April 1999.

21. "Impact of Unidirectional Links on Wireless Ad-Hoc Networks."
DIMACS Workshop on Mobile Networking and Computing, Rutgers University, March 1999.

22. "Distributed Wireless Channel Allocation in Networks with Mobile Base Stations."
IEEE INFOCOM'99, New York, March 1999.

23. "Architecture for Group Communication in Mobile Systems."
The Seventeenth IEEE Symposium on Reliable Distributed Systems (SRDS), West Lafayette, Indiana, October 1998.

24. "A Feedback Based Scheme For Improving TCP Performance in Ad-Hoc Wireless Networks."
The Eighteenth International Conference on Distributed Computing Systems (ICDCS), Amsterdam, May 1998.

25. "Flexible General Purpose Communication Primitives for Distributed Systems."
The Sixth Conference on High Performance Distributed Computing (HPDC), Portland, Oregon, August 1997.

26. "Dynamic Hashing + Quorum = Efficient Location Management for Mobile Computing Systems."
ACM Symposium on Principles of Distributed Computing (PODC), Santa Barbara, California, August 1997.

27. "Location Management in Cellular Mobile Networks."
Purdue University, Computer Science Department, July 1997.

28. "Distributed Wireless Channel Allocation in Cellular Systems with Mobile Base Stations."
Workshop on Nomadic Computing, Geneva, April 1997.

29. "Modeling and Analysis of Channel Transferability in Mobile Computing Environments."
International Conference on Parallel and Distributed Systems, Tokyo, June 1996.

30. "An Efficient Causal Ordering Algorithm for Mobile Computing Environments."
The Sixteenth IEEE International Conference on Distributed Computing Systems, Hong Kong, May 1996.

31. "Distributed Dynamic Channel Allocation for Mobile Computing."
The Fourteenth ACM Symposium on Principles of Distributed Computing, Ottawa, Canada, August 1995.

32. "Architectural Issues in Designing Heterogeneous Parallel Systems with Passive Star-Coupled Optical Interconnection."
International Symposium on Parallel Architecture, Algorithms, and Networks, Kanazawa, Japan, December 1994.

33. "Maximal Global Snapshot with Concurrent Initiators."
The Sixth IEEE Symposium on Parallel and Distributed Systems, Dallas, Texas, October 1994.

34. "On the Relative Speed of Messages and Hierarchical Channels."
The Fourth IEEE Symposium on Parallel and Distributed Systems, Arlington, Texas, December 1992.

Contributed (unrefereed) oral presentations at professional meetings:

1. "A Wireless Data Center using 60 GHz Links." Systems and Networking/ICWS Seminar, University of Illinois at Urbana Champaign, March 13, 2013.

2. "The Need for Credible Wireless Networking Testbeds." College of Electrical Engineering and Computer Science Seminar Series, National Chiao-Tung University, Taiwan, September 2011.

3. "RF in the Jungle: Effect of Environment Assumptions on Wireless Experiment Repeatability."
IEEE Communications and Vehicular Technology Society, Dallas chapter, January 2009.

4. "RF in the Jungle: Effect of Environment Assumptions on Wireless Experiment Repeatability."
Department of Computers and System Sciences, University of Rome - *La Sapienza*, October 2008.

5. "Distributed, dynamic configuration of nodes in mobile ad hoc networks."
Department of Computer Science, University of Juarez, Mexico, September 2005.

6. "Distributed, dynamic configuration of nodes in mobile ad hoc networks."
Department of Computer Science, Federal University of Santa Catarina, Florianopolis, Brazil, October 2004.

7. "Energy-Efficient Schemes for Wireless Sensor Networks with Multiple Mobile Base Stations."
Department of Computer Engineering, Villanova University, Villanova, Pennsylvania, November 2003.

8. "Max-Min D-Cluster Formation in Mobile Ad Hoc Networks."
EPFL, Lausanne, Switzerland, June 2003.

9. "Energy-Efficient Schemes for Wireless Sensor Networks with Multiple Mobile Base Stations."
EPFL, Lausanne, Switzerland, June 2003.

10. "MANETconf: Configuration of Hosts in a Mobile Ad Hoc Network."
Department of Computer Science and Engineering, Southern Methodist University, April 2003.

11. "DADHCP: Distributed Dynamic Configuration of Hosts in a Mobile Ad Hoc Network."
Summer Research Institute, EPFL, Lausanne, Switzerland, July 2001.

12. "Problems with Existing Routing Protocols in Wireless Ad Hoc Networks."
Department of Electrical Engineering, University of Washington, August 1999.

13. "Information Dissemination Issues in Wireless Ad Hoc Networks."
National Science Foundation - Advanced Network Infrastructure Research Division, Washington, D.C., NSF PI meeting, January 1999.

14. "Transport Layer Protocol for Wireless Ad Hoc Networks."
Department of Computer Science, University of Hartfordshire, June 1998.

15. "Transport Layer Protocol for Wireless Ad Hoc Networks."
Department of Computer Engineering, University of Rome, "La Sapienza", June 1998.

16. "Network Aware Computing in Mobile Systems."
Communications Technology Update '98, IEEE Dallas chapter of Communications and Vehicular Technology Society, Richardson, Texas, April 1998.

17. Distributed, Load Balanced Location Management in Cellular Networks."
Department of Computer Science, Purdue University, July 1997.

External funding for original investigations:

Proposals under review:

- *NeTS: Small: Cross-Layer Solutions to Improve Application Performance in Cellular Networks*
Investigator: Ravi Prakash, primary institution: UT Dallas.
National Science Foundation
Submitted on January 14, 2015 ($267,071).

Grants/contracts awarded:

- *REU supplement to MRI Consortium: Development of Wireless Networking Testbed and Emulator (WiNeTestEr).*
Investigator: Ravi Prakash.
National Science Foundation, *(Total: $36,096)* (May 1, 2012 – September 30, 2013).

- *MRI Consortium: Development of Wireless Networking Testbed and Emulator (WiNeTestEr).*
Investigators (UTD): Ravi Prakash (principal), S. Venkatesan, Neeraj Mittal, and Bhaskar Banerjee.
Investigators (SMU): Dinesh Rajan (principal), Jinghong Chen, Ping Gui, Joseph Camp.
National Science Foundation, *(Total: $985,958, UTD share: $498,230)* (October 1, 2010 – September 30, 2015).

- *Wireless Mesh Networking.*
  Investigators: Ravi Prakash (principal) and S. Venkatesan.
  Texas Emerging Technologies Fund (Prime: AgileMesh, subcontractor: UTD), *(Total: $2,000,000, UTD share until now: $157,049)*, (May 2010 – April 2011).

- *EAGER: Reconfigurable Gigabit Wireless Networks for Data Center Interconnects.*
  Investigators: B. Banerjee and R. Prakash.
  National Science Foundation, *($61,200)* (September 15, 2009 – August 31, 2010).

- *Texas Networking Testbed.*
  Investigators: S. Venkatesan (principal), Ravi Prakash, and Neeraj Mittal.
  Defense Microelectronics Activity (Prime: Crane Aerospace, subcontractor: UTD), *($1,500,000, UTD's component: $673,000: $385,000 in cash and $288,000 in equipment)* (June 2008 – May 2009).

- *Texas Networking Testbed.*
  Investigators: S. Venkatesan (principal), Ravi Prakash, and Neeraj Mittal.
  Defense Microelectronics Activity (Prime: Crane Aerospace, subcontractor: UTD), *($1,008,000, UTD's component: $326,017)* (June 2007 – May 2008).

- *Development of Sensor Hardware and Wireless Network Test Beds.*
  Investigators: S. Venkatesan (principal) and Ravi Prakash.
  Signal Technology, A Crane Company, Plano, TX, *($48,000)* (January 2006 – January 2007). Extension to the contract of previous year.

- *Development of Sensor Hardware and Wireless Network Test Beds.*
  Investigators: S. Venkatesan, Ravi Prakash and Neeraj Mittal.
  Signal Technology, A Crane Company, Plano, TX, Information Warfare Directorate (Prime: Signal Technology), *($20,000)* (October 2006 – April 2007).

- *Network-Centric Operations and Warfare Modeling and Simulation Integration Center.*
  Investigators: S. Venkatesan (principal), Ravi Prakash and Neeraj Mittal.
  Rockwell Collins, Inc., Richardson, TX, *($200,000)* (September 2005 – August 2006).

- *Development of Sensor Hardware and Wireless Network Test Beds.*
  Investigators: S. Venkatesan (principal) and Ravi Prakash.
  Signal Technology, Plano, TX, *($90,000)* (May 2005 – February 2007).

- *Research and Development of 3GE-WLAN Seamless Handover for 3GPP Evolution User Equipment.*
  Investigators: S. Venkatesan (principal) and Ravi Prakash.
  ETRI, South Korea, *($100,000)* (September 2005 – August 2006).

- *Self-configuring Hubless Wireless Networking: RFID Networking on Ships.*
  Principal Investigator: Ravi Prakash.
  Williams-Pyro, Inc./U.S. Navy, *($65,000)* (September 2004 – June 2006).

- *US-Switzerland Cooperative Research: Reliable Communication Support for Resource Management in Mobile Ad Hoc Networks.*
  Principal Investigator: Ravi Prakash.
  National Science Foundation, *($29,668)* (September 2004 – August 2006).

- *Low Cost Automatic Shipboard Wireless Configuration Management.*
  Principal Investigator: Ravi Prakash.
  Williams-Pyro, Inc., Fort Worth, Texas, *($12,000)* (August 2002 – December 2002).

- *CAREER Award: Resource management in mobile ad hoc networks - the spatial dimension.*
  Principal Investigator: Ravi Prakash.
  National Science Foundation, *($250,000)* (April 15, 2001 – March 31, 2006).

- *CISE Research Resources: Resources for Research in Scalable Parallel Computing and Networking Simulation.*
  Investigators: Gopal Gupta (PI), Ravi Prakash, Ovidiu Daescu.
  National Science Foundation, *($63,330)* (September 2001 – August 2004).

- *A Study of Strategies for IP Quality of Service.*
  Investigators: Biao Chen, G.R. Dattatreya, Ravi Prakash, I.-L. Yen, and S.Q. Zheng.
  Alcatel Network Systems, Inc., *($50,000)* (January 1999 – December 1999).

- *Routing and Simulations in Satellite Domain of LEO-Based Satellite Networks.*
  Principal Investigator: Ravi Prakash.
  Nortel Networks, *($30,000)* (October, 1998 – September, 1999).

- *Quroum Based Mobility Management for Ad-Hoc Networking.*
  Principal Investigator: Ravi Prakash.
  Division of Advanced Networking Infrastructure Research (ANIR) of the National Science Foundation, *($48,425)* (September, 1998 – December, 1999).

- *Design of Mobile Computing and Communication Systems with Mobile Base Stations.*
  Principal Investigator: Ravi Prakash.
  Division of Computer and Computation Research (CCR) of the National Science Foundation, *($115,000)* (June, 1997 – May, 1999).

Teaching

Doctoral advisement:

1. Hars Vardhan, Fall 2013, "Polycell: Wireless Data Center with Millimeter-wave Network."

2. Ehsan Nourbakhsh, Summer 2013, "Wireless Sensor Networks for Monitoring Smart Grids: Design and Experimental Verification."

3. Qasim Javed, Fall 2012, "Improving the Performance of Wireless Mesh Networks with Better Medium Access and Routing Strategies."

4. Michael James Brehm, Fall 2012, "Resource Allocation Algorithms Optimized for Overload States in the LTE Downlink."

5. Mansi Thoppian, Fall 2006, "Medium Access Control Protocols for Cognitive Radio-based Multi-hop Wireless Networks."

6. Shashidhar Rao Gandham, Spring 2006, "Near Optimal Algorithms for Link Scheduling, Routing and Positioning of Mobile Base Stations in Wireless Sensor Networks."

7. Srikant Kuppa, Spring 2006, "Characterising the Expected Performance of IEEE 802.11 DCF and its QoS Enhancements."

8. Mansoor Mohsin, Spring 2006, "Reliable Communication in Mobile Ad Hoc Networks."

9. Aqeel Siddiqui, Summer 2003, "Towards Unification of Clustering Mechanisms for Multi-Cluster Mobile Ad Hoc Networks."

10. Alan D. Amis, Spring 2003, "D-Cluster Formation and Routing in Mobile Ad Hoc Networks."

11. Sanket Nesargi, Fall 2002, "Distributed Approaches to Design Network Services in Rapidly Deployable Wireless Networks."

Doctoral advisement: current students

1. Joseph Beshay.

2. Swair Shah.

Masters advisement:

1. Sabur Hassan Baidya, Summer 2013. "Performance Improvement of Multipath TCP over Non-uniform paths using Slow Path Adaptation."

2. Lily Lorkowski, Spring 2013. "Enhancements for a User-Friendly Interface for the WiNeTestEr Testbed."

3. Chaitra Kallianpur, Fall 2012. "Evaluation of Cloud-Based Web Acceleration Solutions for Mobile, Wireless Devices."

4. Vijay Prasan Rajavenkateswaran, Spring 2012. "Multi Protocol Analysis Using Wireshark."

5. Vikas Shivamurthy, Summer 2010. "Emulation of multipath effects on ASSERT and study of its effects on various layers of the protocol stack."

6. Kunal Sahu, Summer 2008. "Data Aggregation in Wireless Sensor Networks."

7. Arnab Ghosh, Spring 2003. "Implementation of a MANET on a Wired Network and Performance Study of AODV."

8. Dimple Kuriakose, Spring 2003. "Study of Unidirectional Links in a MANET Testbed with Wireless Links Emulation on a LAN."

9. Shashidhar Rao Gandham, Fall 2002. "Energy-Efficient Schemes for Wireless Sensor Networks with Multiple Mobile Base Stations."

10. Mansi Thoppian, Fall 2002. "A Protocol for Dynamic Configuration of Nodes in Manets."

11. Daniel Russo, Spring 2002. "A Source Sequenced Link State Routing Protocol for Mobile Ad Hoc Networks with Unidirectional Wireless Links."

12. Alan D. Amis, Fall 1999. "Max-Min D-Cluster Formation in Wireless Ad Hoc Networks."

Bachelors honors advisement:

1. William Chris Evans, August 2008. "Rotary Wing Development Platform."

2. Anita M.G. Hussain, December 1997. "Total Ordering of Messages in Distributed Networks."

3. Saira Suleman, May 2000. "Load Balanced Clustering in Mobile Ad Hoc Networks."

Administration and curricular development:

1. **Affiliated faculty member, Collegium V Honors Program:** University of Texas at Dallas, Fall 2014-present.

2. **Member, Academic Council:** University of Texas at Dallas, 2006-2007, 2008-2009, 2012-present.

3. **Senator:** University of Texas at Dallas, 2003-2004, 2005-present.

4. **Chairman, Information Security Advisory Committee:** Senate committee, University of Texas at Dallas, 2012-present.

5. **Member, Ad Hoc Committee:** to evaluate the tenure and promotion case of Dr. Banks Miller, School of Economics, Political and Policy Sciences, 2014-15.

6. **Outside Chair, Ph.D. Comittee:** Lu-Chung Weng, School of Economics, Political and Policy Sciences, 2014.

7. **Member, Academic Advisory Committee:** Erik Jonsson School of Engineering and Computer Science, University of Texas at Dallas, 2014 - 2015.

8. **Mentor:** McDermott Fellowship program, University of Texas at Dallas, 2014 - 2015.

9. **Member, search committee for Director of Information Security:** University of Texas at Dallas, 2013-14.

10. **Member, Committee on Education Policy:** Senate committee, University of Texas at Dallas, 2013-present.

11. **Member, Faculty Search Committee:** Department of Computer Science, 2014.

12. **Member, Mid-Probationary Review Committee:** third year evaluation of Dr. Alp Muharremoglu, School of Management, 2013-14.

13. **Member:** UT PACT student selection interview panel, 2013-2015.

14. **Member, Discipline Committee:** University of Texas at Dallas, Fall 2011 - present.

15. **Member, Faculty Search Committee:** Department of Computer Science, 2013.

16. **Member, Ad Hoc Committee:** to evaluate the tenure and promotion case of Dr. Xianjun Geng, School of Management, 2012-13.

17. **Member, Faculty Search Committee:** Department of Computer Science, 2012.

18. **Member:** Director of Payroll Search Committee, University of Texas at Dallas, 2012.

19. **Member, Ph.D. comittee:** Mehmet Engin Tozal, Department of Computer Science, June, 2012.

20. **Outside Chair, Ph.D. comittee:** Musa Subasi, School of Management, June, 2012.

21. **Member, Graduate Admission Committee:** Computer Engineering Program, 2009 - present.

22. **Member, Ad Hoc Committee:** third year review of Dr. Todd Kravet, School of Management, 2011-12.

23. **Senate liaison to Campus Housing Advisory Committee:** University of Texas at Dallas, 2007 - present.

24. **Chair, Ad Hoc Committee:** to evaluate the tenure and promotion case of Dr. Kamil Sarac, 2008-09.

25. **Member, Ad Hoc Committee:** to evaluate the tenure and promotion case of Dr. Mark Vargus, School of Management, 2008-09.

26. **Member, Academic Council:** University of Texas at Dallas, 2006-2007, 2008-2009.

27. **Grade change at the graduate level:** Successfully led the effort to change the grading scheme for graduate courses at U.T. Dallas during the 2006 calendar year.

28. **Chairman, Computer Equipment Committee:** Department of Computer Science, January 2006 - December 2008.

29. **Member, Scholarship Committee:** Department of Computer Science, November 2009 - August 2013.

30. **Member of the Computer Equipment Committee:** Department of Computer Science, November 2000 - August 2003, September 2005 - present.

31. **Chairman of MS-Research Track Committee:** Department of Computer Science, September 2004 - April 2006.

32. **Member of Ph.D. Committee:** Department of Computer Science, September 2003 - December 2005.

33. **Member of the MS-Research Committee:** Department of Computer Science, September 2002 - September 2004.

34. **Faculty Secretary:** Department of Computer Science, September 1997 - August 2003.

35. **Member of the Telecommunications Engineering Governing Committee:** Erik Jonsson School of Engineering and Computer Science, August 2003 - 2006.

36. **Member of the Telecommunications Engineering Committee:** Erik Jonsson School of Engineering and Computer Science, August 1999 - July 2001.

37. **Member of the Graduate Admissions Committee:** Department of Computer Science, September 2002 - August 2003, June 1999 - August 2000.

38. **Member of the Computer Equipment Committee:** Erik Jonsson School of Engineering and Computer Science, November 1997 - November 2000.

39. **Member of Faculty Search Committee:** Department of Computer Science, December 2001 - May 2002, December 2004 - May 2005.

40. **Member of Telecommunications Engineering curriculum development and admissions committee:** School of Engineering, September 1998 - July 2001.

41. **Member of Computer Science curriculum committee:** September 1997 - August 1998.

42. **Development of manuscript/course material for CS 6392, Mobile Computing Systems:** Fall 1997, Fall 1998, and Fall 1999, Fall 2004, Fall 2005, Fall 2006.

Service:

1. **Local Arrangements Chair:** The 12th IEEE International Conference on Mobile Ad Hoc and Sensor Systems, Dallas, Texas, October 2015.

2. **General Chair:** The 17th ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWiM), Montreal, Canada, September 2014.

3. **Technical Program Co-Chair:** The 16th ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWiM), Barcelona, Spain, November 2013.

4. **Technical Program Co-Chair:** 32nd IEEE International Symposium on Reliable Distributed Systems (SRDS 2013), Braga, Portugal, October 2013.

5. **Technical Program Co-Chair:** The 15th ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWiM), Paphos, Cyprus, October 2012.

6. **Workshop Co-Chair:** IEEE Symposium on Reliable Distributed Systems, Irvine, California, October 2012.

7. **Chairman:** IEEE Dallas Section, 2012.

8. **Local co-organizer:** Annual meeting of the Texas IPv6 Task Force, University of Texas at Dallas, November 2012.

9. **Technical Program Vice-Chair:** IEEE 40th International Conference on Parallel Processing, Taipei, Taiwan, September 2011.

10. **Treasurer & Member of Executive Committee:** IEEE Dallas Section, January 2011 - December 2011.

11. **Secretary & Member of Executive Committee:** IEEE Dallas Section, January 2010 - December 2010.

12. **Associate Editor:** IEEE Transactions on Mobile Computing, August 2005 – present.

13. **Faculty Advisor:** Service through Computing, a UTD student organization offering computing services to area non-profit and charitable organizations.

14. **Co-chair, Technical Program Committee:** IEEE 70th Vehicular Technology Conference, Wireless track, Anchorage, Alaska, September 2009.

15. **Co-chair, Technical Program Committee:** IEEE Symposium on Reliable Distributed Systems (SRDS 2004), Florianopolis, Brazil, October 2004.

16. **Co-chair, Technical Program Committee:** IEEE Emerging Telecommunication Technologies Conference (ETTC 2003), Richardson, Texas, September 2003.

17. **Co-chair, Technical Program Committee:** ACM Workshop on Principles of Mobile Computing (POMC 2002), Toulouse, France, October 2002.

18. **Co-chair, Technical Program Committee:** IEEE Emerging Telecommunication Technologies Conference (ETTC 2002), Richardson, Texas, September 2002.

19. **Program Committee Vice Chair:** Heterogeneous and Mobile Computing track, International Conference on Distributed Computing Systems (ICDCS'02), Vienna, Austria, July 2002.

20. **Workshop Co-Chair:** NSF-ERCIM Workshop on Research in Mobile Middleware, Vienna, Austria, July 2002.

21. **Registration Chair:** IEEE Symposium on Reliable Distributed Systems (SRDS), October 2001.

22. **Panelist:** proposal review panels of National Science Foundation.

23. **Registration Chair:** ACM Symposium on Mobile Computing (Mobicom), 1998.

24. **Program Committee Member:** SRDS'98, ASSET'99, ICDCS'99, IEEE Emerging Technologies Symposium on Wireless Communications and Systems '99, Workshop on Mobile Computing (ISPAN'99), International Workshop on Group Communication (ICPP'99), Dial-M for Mobility'99, SRDS-2000, ASSET-2000, ICCCN-2000, IEEE ETS-2000, ICDCS-2001, ISCA PDCS-2001, IEEE ETS-2001, ICDCS-2002, Pervasive Computing 2003, INFOCOM-2004, SRDS-2004, ICDCS-2005, SRDS-2005, IWDC-2005, LADC-2005, IWDDS-2006, SSS-2006, MASS-2007, SRDS-2008, WoWMoM-2008, Globecom-2008, Autonomics-2008, SSS-2008, WoWMoM 2009, SRDS-2009, SRDS-2010, MASS-2010, MSWim-2010, SSS-2010, MASS-2011, SSS-2011, MSWiM-2011, ICON2012, SRDS-2012, SRDS-2014, ICDCS-2014, SRDS-2015.

25. **Publicity Co-Chair:** ASSET'99.

26. **Session Chair:** ASSET'98, SRDS'98, ASSET-2000, SRDS-2008, SECON-2009.

27. **Technical Program Co-Chair:** IEEE Dallas chapter of Communications and Vehicular Technology Society, 1998-2000. During the year 1999-2000 this chapter won the *Chapter of the Year* among the 130 chapters of the society world-wide.

28. **Organizer and Moderator of Panel Discussion:** ASSET'98, Emerging Technologies Symposium '99.

29. **Selected journals and conferences for which served as reviewer:**

   (a) IEEE Transactions on Mobile Computing
   (b) IEEE Transactions on Computers
   (c) IEEE Transactions on Parallel and Distributed Systems
   (d) Theoretical Computer Science (special issue on Distributed Algorithms)
   (e) IEEE/ACM Transactions on Networking
   (f) IEEE Journal in Selected Areas of Communication
   (g) Journal of Parallel and Distributed Computing
   (h) Distributed Computing Journal
   (i) ACM/Baltzer Journal on Mobile Networks and Applications
   (j) Information Processing Letters
   (k) International Conference on Distributed Computing Systems
   (l) ACM Symposium on Principles of Distributed Computing
   (m) International Conference on Parallel Processing
   (n) Symposium on Parallel and Distributed Processing
   (o) International Symposium on High Performance Distributed Computing

(p) International Conference on Computer Communications and Networks

(q) International Mobile Computing Workshop

(r) IEEE Workshop on Discrete Algorithms for Mobility, 1999

(s) IEEE Symposium on Reliable Distributed Systems, 1998 and 2000.

(t) IEEE International Conference on Computer Communications and Networks, 1997 and 2000.

(u) IEEE Computer

30. **Consultation:** Hubbard Law Intellectual Property (Dallas, Texas), Award Communications (Richardson, Texas); Williams-Pyro, Inc. (Fort Worth, Texas); xG Technology, LLC (Fort Lauderdale, Florida).