

RAVI PENDSE

EDUCATION

Harvard University, Leadership Institute	IEM	2009
Wichita State University Electrical Engineering	Ph.D.	1994
Wichita State University Electrical Engineering	M.S.	1985
Osmania University, India Electronics and Communication Engineering First division with distinction	B.S.	1982

PROFESSIONAL EXPERIENCE

Brown University

Vice President and Chief Information Officer, Computing and Information Services: September 2013 – Present.

Professor of Practice, Computer Science and Engineering, July 2014 – Present.

WICHITA STATE UNIVERSITY

ACADEMIC APPOINTMENTS

Professor, Cisco Fellow, Senior NIAR Fellow, and Executive Director of Advanced Networking Research Institute (ANRI), Department of Electrical Engineering and Computer Science, College of Engineering, **Tenured Full Professor.** May 2006 – August 2013.

Associate Professor, Cisco Fellow, and Director of Advanced Networking Research Center, Department of Electrical and Computer Engineering May 2000 – May 2006.

Consultant, Cisco Systems, July 1997 - Present.

Assistant Professor and Director of CISCO Lab, Department of Electrical and Computer Engineering, August 1994 – May 2000. Tenured and promoted to associate professor in May 2000.

Teaching Fellow, Department of Electrical and Computer Engineering: August 1992 – May 1994 and August 1987 – August 1989.

Graduate Teaching Assistant (GTA and GRA), Department of Electrical and Computer Engineering, August 1983 – August 1987.

ADMINISTRATIVE APPOINTMENTS

Vice President for Information Technology and Chief information Officer (CIO): July 2011 – August 2013.

Interim Dean, University Libraries: August 2009 – June 2011.

Associate Provost and Chief information Officer (CIO): July 2005 – June 2011.

Interim Associate Vice President for Academic Affairs and Research (AAR): June 2004 – July 2005.

Director, Center for Teaching and Research Excellence: 2002 – June 2005.

NORTHERN ARIZONA UNIVERSITY

Assistant Professor, College of Engineering and Technology, Northern Arizona University, August 1989 - August 1992.

GRANTS

Funded (Single Investigator)

1. R. Pendse, “Technical Research Center.” \$433,000, Palo Alto Networks, January 2013.
2. R. Pendse, “Software Design Center.” \$200,000, Spirit Aero Systems, January 2013.
3. R. Pendse, “Aviation Network Simulator.” \$30,000, Federal Aviation Administration, July 2012.
4. R. Pendse, “Technical Research Center.” \$1,300,000, Cisco Systems, June 2012
5. R. Pendse, “Technical Research Center.” \$453,000, Palo Alto Networks, January 2012.
6. R. Pendse, “Aviation Network Simulator.” \$15,000, Federal Aviation Administration, July 2011.
7. R. Pendse, “Technical Research Center.” \$2,000,000, Cisco Systems, June 2011
8. R. Pendse, “Technical Research Center.” \$2,400,000, Cisco Systems, June 2010.
9. R. Pendse, “Aviation Network Simulator.” \$10,000, Federal Aviation

Administration, January 2010.

10. R. Pendse, "Technical Research Center." \$2,400,000, Cisco Systems, June 2009.
11. R. Pendse, "Storage Networking Research Center." \$96,000, LSI, January 2009.
12. R. Pendse, "Technical Research Center." \$2,400,000, Cisco Systems, June 2008.
13. R. Pendse, "Technical Research Center." \$2,400,000, Cisco Systems, June 2007.
14. R. Pendse, "Technical Research Center." \$2,400,000, Cisco Systems, June 2006.
15. R. Pendse, "Cisco Graduate Assistants." \$50,000, Cisco Systems, August 2005. This grant is used support numerous graduate students.
16. R. Pendse, "Web based solutions to SANs." \$30,000, LSI Logic, August 2005
17. R. Pendse, "Network based Aviation Security." \$100,000, NIS, July 2005.
18. R. Pendse, "Technical Research Center." \$2,000,000, Cisco Systems, June 2005.
19. R. Pendse, "Cisco Graduate Assistants." \$50,000, Cisco Systems, August 2004. This grant is used support numerous graduate students.
20. R. Pendse, "Web based solutions to SANs." \$30,000, LSI Logic, August 2004.
21. R. Pendse, "Network based Aviation Security." \$125,000, NIS, July 2004.
22. R. Pendse, "Aviation Security Issues." \$100,000, Cisco Systems, August 2003.
23. R. Pendse, "Web based solutions to SANs." \$24,000, LSI Logic, August 2003.
24. R. Pendse, "Cisco Graduate Assistants." \$50,000, Cisco Systems, August 2003. This grant is used support numerous graduate students.
25. R. Pendse, "Cisco Graduate Assistants." \$50,000, Cisco Systems, August 2002. This grant is used support numerous graduate students.
26. R. Pendse, "Internet Stations in an Automobile." \$60,000, Cisco Systems, January 2002.
27. R. Pendse, "Cisco Graduate Assistants." \$50,000. Cisco Systems, August 2001. This grant is used support numerous graduate students.
28. R. Pendse, "Voice Over IP Lab," \$1,200,000. Cisco Systems, August 2000. Used to set up a new Voice over IP Laboratory.
29. R. Pendse, "Internet Stations in an Automobile," \$62,950, Cisco Systems. August 2000 – May 2001. Quarter time funded release.
30. R. Pendse, "Investigation of Unix operating system," \$62,950, Cisco Systems. August 2000 – May 2001. Quarter time funded release.
31. R. Pendse, "Cisco Graduate Assistants." \$50,000. Cisco Systems, August 2000. This grant is used support numerous graduate students.
32. R. Pendse, "Cisco Graduate Assistants." \$10,000. Cisco Systems. August 1999. This grant is used support numerous graduate students.
33. Director, Cisco Systems CCIE Preparation Lab, Funded quarter time position from the revenues generated in the lab. In addition, 6 graduate students are supported each semester in the CCIE lab and the student router lab.

34. R. Pendse, "Cisco Systems CCIE preparation Lab," \$74,570, July 1st 1999 – June 30th 2000. A part of the income was used to pay for my quarter time release and to support graduate and undergraduate students.
35. R. Pendse, "Cisco Systems CCIE preparation lab," \$140,399, July 1st 1998 – June 30th 1999. A part of the income was used to pay for my quarter time release and to support graduate and undergraduate students.
36. R. Pendse, "Cisco Systems CCIE preparation lab," \$95,000, July 1st 1997 – June 30th 1998. A part of the income was used to support graduate and undergraduate students.
37. R. Pendse, "Equipment Grant," Cisco systems, \$70,000. June 1997. Using this grant the student router lab in room 308 WH was established.
38. R. Pendse, "Equipment Grant," INTEL, \$6,390. June 1997. This equipment enhanced the student router lab.

Joint Proposals (I was the PI)

1. R. Pendse, N. Jaggi, V. Namboodiri, H. Kwon, "Novel Coding and Differentiation Mechanism to Innovate Army Wireless Communications and Ad Hoc Networks, DOD EPSCoR, \$408, 372. June 2008.
2. R. Pendse and J. Watkins, "SprayCool Investigation." \$100,000, KTEC, November 2005.
3. R. Pendse and J. Watkins, "SprayCool Investigation." \$50,000 ISR Systems, June 2005
4. R. Pendse and K. Namuduri, "Network based Aviation Security." \$75,000, NIS, July 2003.
5. R. Pendse "Worksite Accommodation Adaptation from a Pragmatic Perspective." NIDRR, \$102,580 per year. PI. Project Director was Dr. Elmer Hoyer. 1995 - 1997.

My funded proposals to date where I was the principal investigator total \$21,704,221.

Funded Joint Proposals (CO-PI)

1. S. K. Jayaweera, K. Namuduri, B. Natarajan, R. Pendse, J. Steck, "Gateway to New Research Opportunities: A Low-Energy Wireless Ad-Hoc Sensor Networks Test-bed." \$195,000, NSF EPSCoR. CO_PI, July 2004.
2. K. Namuduri, R. Pendse, C. Cetinkaya, C. Chang, and P. Ramanan. "Enhancing the IAS Curriculum at Wichita State University," \$200,000, NSF. CO-PI, July 2003
3. R. Pendse, "The integration of CAD tools into Computer Engineering Curriculum," NSF Infrastructure grant, \$200,000, September 1991. I was one of the four co-principal investigators. Funded.

My funded proposals where I was the Co-PI total \$595,000.

Proposals that were not funded

1. R. Pendse “Utilizing Dynamic Auditory Localization as a Quantitative Measure of Auditory Processing Capability,” NIDRR, \$374,522. PI.
2. R. Pendse, “Mobile Multi-Service Networks: Design and Deployment Issues.” \$609,598, August 2001. National Science Foundation. PI.
3. R. Pendse, “Mobile Wireless Devices and Seamless Internet Access: Design and Deployment Issues.” \$617,318, Kansas Depscor Competition. PI.
4. K.Namuduri, S. Jayaweera, R.Pendse, and H. Kwon, “Special Projects in Networking Fundamental Problems in Adhoc Networking,” \$845,000. NSF. Co-PI
5. K. Namuduri, R. Pendse. “Research Equipment grant,” DURIP Grant. Air Force Office of Scientific Research and Office of Naval Research. \$400,000. Co-PI.
6. R. Pendse et. al. “Applied Ergonomics – the key to Human Opportunity and Productivity,” US Department of Education, NIDRR, \$800,000 per year. June 1998 – May 2003. PI.
7. R. Pendse et. al. “Utilizing Dynamic Auditory Localization as a Quantitative Measure of Auditory Processing Capability,” NIDRR, \$374,522. PI.

Proposals submitted to WSU (college or university research committees, Funded)

1. R. Pendse “Smart Caches – Is that Possible,” WSU URCA award, July 1999, \$4,500, Funded.
2. R. Pendse “FPGA Based Hardware for Speech Processing” WSU URCA award, October 1994, \$3,100, Funded.

JOURNAL PUBLICATIONS (* INDICATES STUDENT)

1. T. Ghose*, V. Namboodiri, and R. Pendse, “Thin is Green: Leveraging the Thin Client Paradigm for Sustainable Mobile Computing,” Computers and Electrical Engineering, Accepted for publication, March 2015.
2. A. Asaduzzaman, R. Chaturvedula*, and R.Pendse, “A Novel Folded-Torus Based Network Architecture for Power-Aware Multicore Systems, Computers and Electrical Engineering, Volume 39, Issue 8 pp. 2494 – 2506, September 2013.
3. H. Hatime*, R.Pendse, and J. Watkins, “A Comparative Study of Task Allocation Strategies in Multi-Robot Systems,” IEEE Sensors Journal, Volume 13, Issue 1 pp. 253 – 262, January 2013.
4. K. Namuduri and R.Pendse, “Analytical Estimation of Path Duration in Mobile Ad Hoc Networks,” IEEE Sensors Journal, Volume 12, Issue 6 pp. 1828 – 1835, 2012.

5. N. Jaggi, S. Madakasira*, S. Mereddy*, and R. Pendse, "Adaptive Algorithms for Sensor Activation in Renewable Energy based Sensor Systems," Elsevier Adhoc Networks, DOI: 10.1016/j.adhoc.2011.04.008, April 2011.
6. V. Namboodiri and R. Pendse, "Bit Level Synchronized MAC Protocol for Multi-Reader RFID Networks," EURASIP Journal on Wireless Communications and Networking, Volume 2010, pp. 1 – 15, April 2010.
7. N. Thanthy*, I. Emmadi*, A. Srikumar*, K. Namuduri, and R. Pendse, "SVSS: Intelligent Video Surveillance System for Aircraft," IEEE Aerospace and Electronic System Magazine, Volume 24, Issue 10, pp. 23 – 29, October 2009.
8. M. Qasaymeh*, G. Hiren*, N. Tayem, M. Sawan, and R. Pendse, "Joint Time Delay and Frequency Estimation without Eigen Decomposition," IEEE Signal Processing Letters, Volume 16, Issue 5, pp. 422 – 425, May 2009.
9. S. Guhl* and R. Pendse, "The Communications Assistance for Law Enforcement Act (CALEA)," Information Security Journal: A Global Perspective, Volume 17, Issue 3, pp. 113 -- 116, 2008.
10. R. Bhagavathula*, P. Best*, and R. Pendse, "Mobility and Layer 2 Tunnels," Wireless Personal Communications, Springer, Volume 39, Issue 3, pp. 361 -- 380, November 2006.
11. P. Best* and R. Pendse, "Quantitative Analysis of Enhanced Mobile IP," IEEE Communications Magazine, Volume 44, no.6, pp. 66 -- 72, June 2006.
12. N. Thanthy*, M.S. Ali*, and R. Pendse, "Security, Internet Connectivity and Aircraft Data Networks," IEEE Aerospace and Electronic System Magazine, Volume 21, Issue 5, pp. 12 – 16, May 2006.
13. N. Thanthy*, A. Kalamkar*, and R. Pendse, "TCP-M: Multiflow Transmission Control Protocol for Ad Hoc Networks," EURASIP Journal on Wireless Communications and Networks," Volume 2006, Issue 2, 16 pages, April 2006.
14. R. P. Mann*, K. R. Namuduri, and R. Pendse, "Energy Aware Routing Protocol for Wireless Sensor Networks," EURASIP Journal on Wireless Communications and Networks," Volume 5, pp. 635 -- 644, December 2005.
15. V. Bahety* and R. Pendse, "Bridging the generation gap," IEEE Potentials, Volume 24, Issue 4, pp. 17 – 20, November 2005.
16. D. Joshi*, K. R. Namuduri, and R. Pendse, "Secure, Redundant, Fully Distributed Key Management scheme for Mobile Adhoc Networks: An Analysis," EURASIP Journal on Wireless Communications and Networks, Vol. 4, pp. 579 -- 589, September 2005.
17. N. Thanthy* and R. Pendse, "Aviation Data Networks: Security Issues and Network Architecture," IEEE Aerospace and Electronic System Magazine, Volume 20, Issue 6, pp. 3 – 8, June 2005.
18. I. Bashir*, K. Namuduri, and R. Pendse, "A Light Weight Dynamic Rate Control Scheme for Video Transmission over IP Network," Pattern Recognition Letters, pp. 817 – 827, May 2004.

19. T. Immich*, R. Bhagavthula*, and R. Pendse, "Performance Analysis of Five Interprocess Communication Mechanisms Across UNIX Operating Systems," *The Journal of Systems and Software*, Volume 68, No. 1, pp. 27 – 43, October 2003.
20. R. Bhagavthula*, S. Ananthanarayana*, and R. Pendse, "Measurement of Fax Quality on a Fax over IP Network," *International Journal of Computers and Their Applications*, Volume 10 No.2, pp. 73 – 82, June 2003.
21. R. Pendse and U. Walterscheidt*, "A Low Overhead, Least Recently Used Block Replacement Scheme with Flooding Protection (LRU-FP)," *International Journal of Computers and Their Applications*, pp. 71 -- 76. June 1998.

BOOK CHAPTERS

1. R. Pendse, "Taking a Proactive Approach to Technology Innovation," *Inside The Minds* series from ASPATORE, pp. 109 - 116, January 2009.
2. R. Norville* and K. R. Namuduri, and R. Pendse, "Zero-Knowledge Proofs for Node Authentication," *Idea Book Publishers*, pp. 143 – 166. December 2005, published in 2007.
3. P. Kahai*, K. R. Namuduri, and R. Pendse, "Privacy enabled Forensic Profiling," *Idea Book Publishers*, pp. 137 - 154, June 2005, published in 2006.

REFEREED CONFERENCE PUBLICATIONS (full paper published in the proceedings)

1. F. Baloch and R. Pendse, "A new transmission control protocol for active RFID networks," *Proceedings of the 28th IEEE International Conference on Advanced Information Networking and Applications Workshop*, Victoria, BC, Canada, May 2014
2. F. Baloch and R. Pendse, "A new anti-collision protocols for RFID Networks," *Proceedings of the IEEE Wireless Telecommunication Symposium*, Washington, DC, April 2014
3. T. Ghose, S. Satras, V. Nambooduri, and R. Pendse, "Efficient Resource Management for Sustainable Mobile Computing," *Proceedings of the International Symposium on Sustainable Systems and Technology*, Cincinnati, Ohio, May 2013.
4. V. Suryanarayan, S. Dhanekula, A. Asadsuzzaman, and R. Pendse, "Desktop virtualization in cloud and BWT compression" *Proceedings of the Parallel and Distributed Computing and Systems conference of Local Computer*, Las Vegas, Nevada, 2012.

5. V. Suryanarayan, A. Jasti, and R. Pendse, "Credit Scheduling and Prefetching in Hypervisors using Hidden Markov Models," Proceedings of the IEEE conference of Local Computer Networks (LCN), Denver, Colorado, October 2010.
6. T. Ghose, V. Nambooduri, and R. Pendse, "Energy Dependent Analytical Model for Sustainable Portable Computing Devices," Proceedings of the IEEE International Symposium on Sustainable Systems and Technology (ISSST), Boston, Massachusetts, May 2012.
7. H. Gao, T. Best, R. Pendse and E. Sawan, "Traffic Classification and Observer Design of Cable Networks," Proceedings of the IEEE Annual International Workshop on Communications Quality and Reliability (CQR), San Diego, California, May 2012.
8. H. Gao, T. Best, R. Pendse and E. Sawan, "Theoretic Performance Analysis of Cable Networks with Strategic Subscribers," Proceedings of the IEEE Annual International Workshop on Communications Quality and Reliability (CQR), San Diego, California, May 2012.
9. T. Ghose, V. Nambooduri, and R. Pendse, "An Analytical Study of Power Consumption in Portable Thin Clients," Proceedings of the IEEE Global Telecommunications Conference (GlobeComm), Houston, Texas, December 2011.
10. A. Jasti, S. Mohapatra, B. Potluri, and R. Pendse, "Cloud Computing in Aircraft Data Network" Proceeding of the IEEE Integrated Communication, Navigation and Surveillance Conference (ICNS), Washington DC, May 2011.
11. A. Rodrigues, T. Best, and R. Pendse, "SCADA Security Device: Design and Implementation," Proceeding of the 7th Annual Cyber Security and Information Intelligence Research Workshop. Oak Ridge National Laboratory, October 2011.
12. F. Baloch, H. Dang, E. Sawan, and R. Pendse, "A New Medium Access Protocol for RFID Networks with Foresight," Proceedings of the IEEE Wireless Telecommunications Symposium, New York City, New York, April 2011.
13. M. Kadiyala, D. Shikha, R. Pendse, and N. Jaggi, "Semi-Markov Process based Model for Performance Analysis of Wireless LANs," Proceedings of the IEEE Percom International Workshop on Pervasive Wireless Networking, Seattle, Washington, March 2011.
14. M. Kadiyala, K. Namuduri, and R. Pendse, "On Dependence of Burst Losses on Packet Inter-Arrival Times in VOIP," Proceedings of the IEEE Globecom Workshop on Multimedia Communications and Services, Miami, Florida, December 2010

15. M. Naeem, V. Namboodiri, and R. Pendse, "Energy Implications of Various VOIP Codecs in Portable Devices," Proceedings of the IEEE conference of Local Computer Networks (LCN), Denver, Colorado, October 2010.
16. V. Suryanarayan, A. Jasti, and R. Pendse, "Credit Scheduling and Prefetching in Hypervisors using Hidden Markov Models," Proceedings of the IEEE conference of Local Computer Networks (LCN), Denver, Colorado, October 2010.
17. A. Jasti, P. Shah, R. Nagaraj, and R. Pendse, "Security in Multi-Tenancy Cloud." Proceedings of 44th IEEE International Carnahan Conference on Security Technology (ICCST), San Jose, California, October 2010.
18. M. Kadiyala, S. Paradi, and R. Pendse, "The Impact of Medium Access Delays on Packet Service-Time in Saturated AdHoc Networks," Proceedings of the IEEE International Workshop on Wireless Local Networks (WLN), Denver, Colorado, October 2010.
19. S. Mereddy, N. Jaggi, and R. Pendse, "An Adaptive Algorithm for Sensor Activation in Renewable Energy based Sensor Systems," Proceedings of the Fifth International Conference on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP), Melbourne, Australia, pp. 55 – 60, December 2009.
20. A. Shah, N. Thanthry, and R. Pendse, "Delay sensitive low-cost security mechanism for mobile IP," Proceedings of 43rd International Carnahan Conference on Security Technology, Zurich, Switzerland, pp. 28 - 35, October 2009
21. N. Thanthry, G. Gopalakrishnan, and R. Pendse, "Alternate encryption scheme for VoIP traffic," Proceedings of 43rd International Carnahan Conference on Security Technology, Zurich, Switzerland, pp. 178 - 183, October 2009
22. M. Qassymeh, G. Hireen, N. Tayem, R. Pendse, and M.Sawan, "Rank Revealing QR Factorization for Jointly Time Delay and Frequency Estimation," Proceedings of IEEE Vehicular Technology Conference, Barcelona, Spain, pp. 1 - 4. April 2009.
23. G. Hireen, M. Qassymeh, N. Tayem, R. Pendse, and M.Sawan, "Efficient Structure Based Carrier Offset Estimator for OFDM System," Proceedings of IEEE Vehicular Technology Conference, Barcelona, Spain, pp. 1 - 3. April 2009.
24. M. Qassymeh, G. Hireen, N. Tayem, R. Pendse, and M.Sawan, "Time Delay Estimator for Frequency Hopping System using Rank-Revealing Triangular Factorization," Proceedings of IEEE Vehicular Technology Conference, Barcelona, Spain, pp. 1 - 4. April 2009
25. M. Qassymeh, G. Hireen, N. Tayem, M. Sawan, and R. Pendse "Propagator Method for Joint Time Delay and Frequency Estimation," Proceedings of IEEE Conference on Signals, Systems & Computers, Pacific Grove, CA, pp. 1671 - 1674. May 2008.

26. R. Hirannaiah, A. Jasti, and R. Pendse, "Influence of Codecs on Adaptive Jitter Buffer Algorithm," Proceedings of 66th Vehicular Technology Conference, Baltimore, MD, pp. 2015 - 2019. October 2007.
27. N. Thanthry, D. Malla, and R. Pendse, "Optimal Zone (OZON) Protocol For Broadcast Control in Ad-Hoc Networks," Proceedings of 66th Vehicular Technology Conference, Baltimore, MD, pp. 169 - 173. October 2007.
28. S. Rao, N. Thanthry, and R. Pendse, "RFID Security Threats to Consumers: Hype vs. Reality," Proceedings of 41st International Carnahan Conference on Security Technology, Ottawa, Canada, pp. 59 - 63. October 2007.
29. N. Thanthry, A. Bhatia, A. Shan, and R. Pendse, "Voice Services and Aviation Data Networks," Proceedings of 26th Digital Avionics Systems Conference, Dallas, TX, pp. 4.E.4-1 - 4.E.4-13. October 2007.
30. N. Thanthry and R. Pendse, "Aircraft Health Management Tool: A Comprehensive User Interface," Proceedings of 26th Digital Avionics Systems Conference, Dallas, TX, pp. 2.C.4-1 - 2.C.4-8. October 2007.
31. N. Thanthry, I. Emmadi, A. Srikumar, K. Namuduri, and R. Pendse, "SVSS: An Intelligent Video Surveillance System for Aircrafts," Proceedings of 26th Digital Avionics Systems Conference, Dallas, TX, pp. 4.E.3-1 - 4.E.3-9. October 2007.
32. R. Sharma and R. Pendse, "Analysis of Link availability and the capacity of mobile ad hoc networks," Proceedings of the 31st IEEE conference on Local Computer Networks, Tampa, FL, pp. 295 - 299. November 2006.
33. V. Ragothaman, F. Baloch, and R. Pendse, "Unassisted Aircraft Landing via Co-operative Data Exchange," Proceedings of 25th Digital Avionics Systems Conference, Portland, OR, pp. 1 - 9. October 2006.
34. N. Thanthry, M. Deshpande, and R. Pendse, "A Novel Mechanism for Improving Performance and Security of TCP Flows over Satellite Links," Proceedings of 40th International Carnahan Conference on Security Technology (ICCST), Lexington, KY, pp. 197 - 202. October 2006.
35. N. Thanthry, C. Goodrich, and R. Pendse, "CALEA compliant Voice over IP security system," Proceedings of 40th International Carnahan Conference on Security Technology (ICCST), Lexington, KY, pp. 191 - 196. October 2006.
36. A. Bhatia, A. Shah, N. Thanthry, and R. Pendse, "Voice, Multimedia Services and Aviation Data Networks," Proceedings of 25th Digital Avionics Systems Conference, Portland, OR, pp. 4.E.4-1 - 4.E.4-13. October 2006.
37. S. Shingvi, N. Thanthry, and R. Pendse, "Aircraft Data Networks and Performance Enhancement Proxies," Proceedings of 25th Digital Avionics Systems Conference, Portland, OR, pp. 1 - 6. October 2006.

38. M. Kadiyala and R. Pendse, "Cross-Layer Analysis of Route Discovery Process and its Impact on the Packet End-to-End Delay in Wireless Ad Hoc Networks," Proceedings of 64th Vehicular Technology Conference, Montreal, Canada, pp. 1 - 5. September 2006.
39. N. Thanthry, S. Kaki, and R. Pendse, "EM-AODV-Metric Based Enhancement to AODV Routing Protocol," Proceedings of 64th Vehicular Technology Conference, Montreal, Canada, pp. 1 - 5. September 2006.
40. S. Arbindi, K. R. Namuduri, and R. Pendse, "Statistical Estimation of Route Expiry Times in On-Demand Ad Hoc Routing Protocols," Proceedings of the International Workshop on Localized Communication and Topology Protocols for Ad Hoc Networks, Washington, DC, pp. 8 - 23. November 2005.
41. N. Thanthry, M. S. Ali, and R. Pendse, "Security, Internet Connectivity and Aircraft Data Networks," Proceedings of the 39th International Carnahan Conference on Security Technology (ICCST), Las Palmas De Gran Canaria, Spain, pp. 12 - 16. October 2005.
42. N. Thanthry, R. Pendse, and K. Namuduri, "Voice over IP Security and Law Enforcement," Proceedings of the 39th International Carnahan Conference on Security Technology (ICCST), Las Palmas De Gran Canaria, Spain, pp. 246 - 250. October 2005.
43. H. Gao, F. Baloch, and R. Pendse, "Transport of Flight Critical Data over Internet Protocol," Proceedings of 24th Digital Avionics Systems Conference, Crystal City, VA, pp. 1.D.2 - 1.1-8 Vol. 1. October 2005.
44. V. Ragothaman, A. Jasti, and R. Pendse, "An Intelligent Network Monitoring and Management Tool for Aircraft Data Networks," Proceedings of 24th Digital Avionics Systems Conference, Crystal City, VA, pp. 10.E.5-1 - 10.E.5 - 7. October 2005.
This paper won the best paper of the session award.
45. S. Obilisetty, A. Jasti, and R. Pendse, "Link stability based enhancements to OLSR (LS-OLSR)," Proceedings of the 62nd IEEE Vehicular Technology Conference, Dallas, Texas, pp. 306 - 310. September 2005.
46. R.P. Mann, S. Arbindi, K. Namuduri, and R. Pendse, "Control traffic analysis of on-demand routing protocols in ad-hoc wireless networks," Proceedings of the 62nd IEEE Vehicular Technology Conference, Dallas, TX, pp. 301 - 305. September 2005.
47. K. Namuduri and R. Pendse, "Introducing Information Security Courses in the ECE curriculum," Proceedings of the ASEE Midwest Symposium, Fayetteville, AR, September 2005.
48. P. Kahai, M. Srinivasan, K. R. Namuduri, and R. Pendse, "Forensic Profiling System," Proceedings of the IFIP WG 11.9 First International Conference on Digital Forensics, Orlando, FL, February 2005.
49. N. Thanthry and R. Pendse, "Voice over IP, Security and Quality of Service – Can they Co-exist?" Proceedings of GLOBECOM 2004 Voice over IP: Challenges and Solutions Workshop, Dallas, TX. December 2004.

50. R. Mann, K. Namuduri, and R. Pendse, "Energy Aware Routing Protocol (EARP) for Ad Hoc Wireless Sensor Networks." Proceedings of GLOBECOM 2004 Adaptive Wireless Workshop, Dallas, TX, pp. 419 - 427. December 2004.
51. M. S. Ali, R. Bhagavathula, and R. Pendse, "Airplane Data Networks and Security Issues," Proceedings of 23rd Digital Avionics Systems Conference, Salt Lake City, UT, pp. 8.E.1 - 81-12 Vol.2. October 2004. **This paper won the best paper of the session and best paper of the track award. It also won the best paper of the entire conference award.**
52. V. Ragothaman, N. Thanthry, R. Bhagavathula, and R. Pendse, "IP Connectivity and DAP," Proceedings of 23rd Digital Avionics Systems Conference, Salt Lake City, UT, pp. 11.B.5 - 111-11 Vol.2. October 2004.
53. M. S. Ali, R. Bhagavathula, and R. Pendse, "Efficient Data Storage Mechanisms for DAP," Proceedings of 23rd Digital Avionics Systems Conference, Salt Lake City, UT, pp. 11.A.3 - 11.1-7 Vol.2. October 2004.
54. N. Thanthry and R. Pendse, "Aviation Data Networks: New Avenues for Flight Safety," Proceedings of the 38th International Carnahan Conference on Security Technology (ICCST), Albuquerque, NM, pp. 265 - 269. October 2004.
55. N. Thanthry and R. Pendse, "Aviation Data Networks: Security Issues and Network Architecture," Proceedings of the 38th International Carnahan Conference on Security Technology (ICCST), Albuquerque, NM, pp. 77 - 81. October 2004.
56. M. Dattani, N. Thanthry, T. Best, R. Bhagavathula, and R. Pendse, "Route Optimized Nested Mobility Solution Using PAT," Proceedings of the 60th Vehicular Technology Conference (VTC), Los Angeles, CA, pp. 3105 - 3109 Vol. 5. September 2004.
57. D. Badami, N. Thanthry, T. Best, R. Bhagavathula, and R. Pendse, "Port Address Translation Based Route Optimization for Mobile IP," Proceedings of the 60th Vehicular Technology Conference (VTC), Los Angeles, CA, pp. 3110 - 3114 Vol. 5. September 2004.
58. N. Thanthry, M. S. Ali, R. Bhagavathula, and R. Pendse, "WLAN and Ad-Hoc Network Coexistence," Proceedings of the 60th Vehicular Technology Conference (VTC), Los Angeles, CA, pp. 5031 - 5035 Vol. 7. September 2004.
59. F. Baloch, S. Muralidharan, C. Strandmark, R. Bhagavathula, and R. Pendse, "Ad-Hoc Networks and Layer 2 Tunnels," Proceedings of the 60th Vehicular Technology Conference (VTC), Los Angeles, CA, pp. 5040 - 5043 Vol. 7. September 2004.
60. A. Jasti, N. Thanthry, and R. Pendse, "Study of Mobile IP Module in OPNET Network Simulator," Proceedings of OPNETWORKS 2004, Washington DC, August 2004.
61. A. Jasti, S. Obilisetty, M. S. Ali, and R. Pendse, "Effect of data transfer on DAS, NAS, and SAN: A Comparison," Proceedings of OPNETWORKS 2004, Washington DC, August 2004.
62. V. Bahety and R. Pendse, "Scalable QoS Provisioning for Mobile Networks using Wireless Sensors," Proceedings of the IEEE Wireless Communications and Networking Conference, Atlanta, GA, pp. 1528 - 1533 Vol. 3. March 2004.

63. S. A. Rasheed, K Masnoon, N. Thanthry, and R. Pendse "PCF Vs DCF: A Performance Comparison," Proceedings of the 36th IEEE Southeastern Symposium on System Theory (SSST), Atlanta, GA, pp. 215 - 219. March 2004.
64. S. Balasubramanian, R. Bhagavathula, N. Thanthry, and R. Pendse, "Performance Analysis of UNIX User Datagram Protocol Implementations," Proceedings of the 36th IEEE Southeastern Symposium on System Theory (SSST), Atlanta, GA, pp. 230 - 235. March 2004.
65. P. Best and R. Pendse, "Enhanced Mobility Protocol for Wireless Networks," Proceedings of the IEEE VTC 2003, Orlando, FL, pp. 2025 - 2029 Vol.3. October 2003.
66. P. Best, S. Gundeti, and R. Pendse, "Self-Learning Ad Hoc Routing Protocol," Proceedings of the IEEE VTC 2003, Orlando, FL, pp. 2824 - 2828 Vol.5. October 2003.
67. R. Bhagavathula, N. Thanthry, K. Namuduri, and R. Pendse, "Issues With Nested Mobility," Proceedings of the IEEE VTC 2003. Orlando, FL, pp. 2009 - 2013 Vol.3. October 2003.
68. N. Thanthry, K. Namuduri, and R. Pendse, "Ad-Hoc Nodes And Internet Connectivity Using Pseudo-Wire Interfaces," Proceedings of the IEEE VTC 2003, Orlando, FL, pp. 2971 - 2975 Vol.5. October 2003.
69. N. Wanichworananat and R. Pendse, "A Traffic Engineering Approach Employing Genetic Algorithms over MPLS Networks," Proceedings of the JCIS 2003, Raleigh, NC, pp. 401 - 404, September 2003.
70. P. Best, K. Namuduri, and R. Pendse, "Quantitative Analysis of Security Protocols in Wireless Networks," Proceedings of the IEEE Workshop on Information Assurance, United States Military Academy, West Point, NY, pp. 290 - 291, June 2003.
71. S. Gorde, N. Thanthry, and R. Pendse, "TCP State Based Service Differentiation in Wireless Networks," Proceedings of OPNETWORKS 2003, Washington DC, August 2003.
72. N. Thanthry, A. Jasti, and R. Pendse, "Issues in Deploying Wireless Networks," Proceedings of OPNETWORKS 2003, Washington DC, August 2003.
73. A. Jasti, A. Kalamkar, and R. Pendse, "DSL vs. Cable: A Comprehensive Comparison," Proceedings of OPNETWORKS 2003, Washington DC, August 2003.
74. D. Joshi, N. Thanthry, K. Namuduri, and R. Pendse, "Implementation of Coordinated Multihop Scheduling in OPNET," Proceedings of OPNETWORKS 2002, Washington DC, August 2003.
75. R. Bhagavathula, N. Thanthry, and R. Pendse, "Mobile IP and Virtual Private Networks," Proceedings of the IEEE VTC 2002, Vancouver, BC, Canada, September 2002.
76. R. Bhagavathula, N. Thanthry, W. Lee, and R. Pendse, "Mobility: A VPN Perspective," Proceedings of the 45th Midwest Symposium on Circuits and Systems. Tulsa, OK, August 2002.

77. R. Bhagavathula, N. Thanthry, W. Lee, and R. Pendse, "MPLS-over-GRE Based VPN: A Performance Comparison," Proceedings of the 45th MidWest Symposium on Circuits and Systems. Tulsa, OK, August 2002.
78. R. Bhagavathula, N. Thanthry, and R. Pendse, "Validation of the MPLS Module in OPNET," Proceedings of OPNETWORKS 2002, Washington DC, August 2002.
79. R. Bhagavathula, N. Thanthry, K. Hardikar, and R. Pendse, "Study of PSTN Circuit Switched Model in OPNET," Proceedings of OPNETWORKS 2002, Washington DC, August 2002.
80. R. Bhagavathula, N. Thanthry, X. Ma, and R. Pendse, "Voice over Cable Network," Proceedings of OPNETWORKS 2002, Washington DC, August 2002.
81. R. Bhagavathula, N. Thanthry, A. Sambaari, and R. Pendse, "Teaching with OPNET: WSU's Experiences," Proceedings of OPNETWORKS 2002, Washington DC, August 2002.
82. D. Khatavkar, E.Hixon, and R. Pendse, "Quantizing the Throughput Reduction of IPsec with Mobile IP," Proceedings of the 45th MidWest Symposium on Circuits and Systems. Tulsa, OK, August 2002.
83. R. Bhagavathula, N. Thanthry, P. Immich, and R. Pendse, "Mobile MOGRE VPN," Proceedings of the International Symposium on Wireless Communication (ISWC) 2002, Victoria BC Canada, September 2002.
84. R. Bhagavathula, S. Moosa, R. Rajamoni, and R. Pendse, "Optimum Nrm Values for ERICA and EFCI Schemes in ATM Networks," Proceedings of the ISCA 14th International Conference on Parallel and Distributed Computing Systems, Dallas TX, pp. 289 - 294, August 2001.
85. R. Bhagavathula, P. Kamat, M. Sehgal, and R. Pendse, "Comparison of VOIP and VOATM for Voice Transmission," Proceedings of the OPNETWORK 2001, Washington DC, August 2001.
86. R. Bhagavathula, J. Phillip, and R. Pendse, "Quality of Voice in Wireless Data Networks," Proceedings of the IEEE CAS Workshop on Wireless Communication and Networking, University of Notre Dame, South Bend, IN, August 2001.
87. R. Bhagavathula, M. Shende, and R. Pendse, "Object Oriented Router Simulator," Proceedings of the ISCA 14th International Conference on Parallel and Distributed Computing Systems, Dallas, TX, pp. 302 - 307, August 2001.
88. R. Bhagavathula, K. Hassan, F. Ali, Md. Abbasi, and R. Pendse "VOIP using Fragmentation and Interleaving over Slow WAN Links," Proceedings of the ISCA 14th International Conference on Parallel and Distributed Computing Systems, Dallas, TX, pp. 335 - 338, August 2001.
89. S. Usman, A. Khan, R. Bhagavathula, and R. Pendse, "Multiservice Network using Public Frame Relay Network," Proceedings of the OPNETWORK 2001, Washington DC, August 2001. **This paper was judged as an excellent paper and received nomination for the best paper award which was sponsored by the IEEE Communication Magazine.**

90. S. Moosa, R. Bhagavathula, R. Rajamoni, and R. Pendse “Impact of RM Cell Frequency on ERICA and EFCI Schemes in ATM,” Proceedings of the OPNETWORK 2001, Washington DC, August 2001. **This paper was judged as an excellent paper and received nomination for the best paper award which was sponsored by the IEEE Communication Magazine.**
91. R. Pendse, R. Bhagavathula and P. Chittor, “Pipeline LRU Block Replacement Algorithm,” Proceedings of the 43rd Midwest Conference on Circuits and Systems, East Lansing, MI, August 2000.
92. R. Pendse, R. Bhagavathula and R. Rajamoni, “Timing Analysis of Block Replacement Algorithm,” Proceedings of the 43rd Midwest Conference on Circuits and Systems, East Lansing, MI, August 2000.
93. R. Pendse, R. Bhagavathula, and S. Tupalli, “Hardware Implementation of LRU Algorithm,” Proceedings of the ISCA 12th International Conference on Computer Applications in Industry and Engineering,” pp. 9 - 12, Atlanta, GA, November 1999.
94. R. Pendse, H. Katta, and R. Rajmoni, “Performance of LRU-FP Block Replacement Algorithm with Pre-fetching,” Proceedings of the ISCA 12th International Conference on Computer Applications in Industry and Engineering,” pp. 13 - 16, Atlanta, GA, November 1999.
95. R. Pendse, A.Q.S. Safdar, “Most Distant Used (MDU) Block Replacement Algorithm and its Derivatives,” Proceedings of the ISCA 12th International Conference on Computer Applications in Industry and Engineering,” pp. 17 - 20, Atlanta, GA, November 1999.
96. R. Pendse and R. Bhagavathula, “Pre-fetching with the segmented LRU Algorithm,” Proceedings of the 42nd Midwest Conference on Circuits and Systems, Las Cruces, NM, pp. 862 - 865, August 1999.
97. R. Pendse and H. Katta, “Selective Pre-Fetching: Pre-fetching when only required,” Proceedings of the 42nd Midwest Conference on Circuits and Systems, Las Cruces, NM, pp. 866 - 869, August 1999.
98. R. Pendse, “Effective Teaching – My Experience from NETI,” Proceedings of the ASEE Midwest Section conference, Stillwater, OK, April 1999.
99. R. Pendse and R. Bhagavathula, “Innovative Pre-fetching techniques for CPU and Disk Caches,” Proceedings of the ISCA 11th International Conference, Las Vegas, NV, pp. 30 - 33, November 1998.
100. R. Pendse and S. Mendu, “LRU-FP Algorithm with Dual Threshold,” Proceedings of the ISCA 11th International Conference, Las Vegas, Nevada, pp. 34 - 37. November 1998
101. R. Pendse, N. Kushalnagar and U. Walterscheidt, “Investigation of Impact of Victim Cache and Victim Tracer on a Fully Associative Disk Cache,” Proceedings of the 41th Midwest Conference on Circuits and Systems, Notre Dame, IN, pp. 78 - 81, August 1998.

102. R. Pendse and R. Bhagavathula, "Performance of LRU Block Replacement Algorithms with Pre-fetching," Proceedings of the 41th Midwest Conference on Circuits and Systems, Notre Dame, IN, pp. 86 - 89. August 1998.
103. R. Pendse and U. Walterscheidt, "Dynamical Adjustment of Block Replacement Algorithms," Proceedings of The Thirtieth Southeastern Symposium on System Theory, Morgantown, WV, pp. 544 - 548. March 1998.
104. R. Pendse, A. Yip, and E. Hoyer, "Real-Time Processing of Speech Signals Using Networked Computers," Proceedings of the 40th Midwest Conference on Circuits and Systems, Sacramento, CA, pp. 802 - 805. August 1997.
105. A. Yip, R. Pendse, and E. Hoyer, "Real-Time Speech Signal Analysis-Synthesis of Hoyer-Harris Model using Networked Computers," Proceedings of the 40th Midwest Conference on Circuits and Systems, Sacramento, CA, pp. 806 - 809, August 1997.
106. R. Pendse, N. Tambe and U. Walterscheidt, "A Novel Graphical Technique for Analysis of Runtime Cache Behavior," Proceedings of the 40th Midwest Conference on Circuits and Systems, Sacramento, CA, pp. 1322 - 1325, August 1997.
107. E. Johnson and R. Pendse "ABC of Microprocessor Design," Proceedings of the ASEE National Conference, Milwaukee, WI, June 1997.
108. R. Pendse and E. Johnson, "Innovative Design Techniques in a Freshman Class," Proceedings of the ASEE National Conference, Milwaukee, WI, June 1997.
109. R. Pendse "Teaching VHDL- Trials and Tribulations," Proceedings of the ASEE Midwest Section meeting, Columbia, MO, April 1997.
110. R. Pendse and U. Walterscheidt, "A Low Overhead, Least Recently Used Block Replacement Scheme with Flooding Protection(LRU-FP)," Proceedings of the 12th International Conference on Computers and Their applications, Tempe, AZ, March 1997.
111. R. Pendse and E. Johnson, "Big Bang, Small Bucks; Effective use of Low-Cost CAD packages," Proceedings of the Frontiers in Education, 26th annual conference, Salt Lake City, UT, November 1996.
112. R. Pendse and E. Johnson, "Teaching an undergraduate class vs graduate class: Is there a difference," Proceedings of the Frontiers in Education, 26th annual conference, Salt Lake City, UT, November 1996.
113. R. Pendse, U. Walterscheidt, and S. Kua, "A Fuzzy Block Replacement Algorithm for Disk Caches," Proceedings of the Midwest Conference on Circuits and Systems, Ames, IA, August 1996.
114. R. Pendse and R. Butts, "World Wide Web: Classroom Assistant," Proceedings of the International Conference on Engineering Education and Practice, Washington DC, June 1996.
115. R. Pendse, "Effective Laboratory Teaching-what works for me," Proceedings of the ASEE Midwest section conference, Wichita, KS, March 1995.

116. R. Pendse and E. Hoyer, "Analysis of Speech Signals using Networked Computers," Proceedings of the IEEE Wichita Conference on Communications, Networking and Signal Processing, Wichita, KS, April 1994.
117. R. Pendse, "Teaching Techniques—What works for me," Proceedings of the ASEE Midwest Section meeting, Lincoln, NE, March 1994. **This paper won the second place award in the conference.**
118. R. Pendse and E. Johnson, "Early Entry Program," Proceedings of the ASEE Midwest Section meeting, Lincoln, NE, March 1994.
119. R. Pendse and M.A. Karim, "Radiographic Screen Film Combination: An Image Analysis," Proceedings of the Maecon, St. Louis, MO, October 1984.
120. M.A. Karim and R. Pendse, "Image Reproduction with Radiographic Screen-Film Combination," Proceedings of the 37th ACEMB, Los Angeles, CA, September 1984.

With the exception of Dr. Namuduri , Dr. Hoyer, Dr. Johnson, Dr. Karim, Dr. Sawan, Dr. Jaggi, Dr. Namboodiri, and Dr. Tayem, all co-authors are my graduate students.

WORKSHOPS AND PRESENTATIONS

1. R. Pendse, Future of Technology – Are we Ready, Stratus Technologies, Keynote Speaker, Providence, RI, March 2015.
2. R. Pendse, Breach Notification Legislation, Testimony in US Senate hearing, Washington DC, February 2015
3. R. Pendse, Cybersecurity Threats, Appearance on the Diane Rehm Show, February 2015.
4. R. Pendse, Cloud and Cloud security, CSS One World event, Keynote Panel, Las Vegas, Nevada, September 2013.
5. R. Pendse, Information Security in the age of Social Media, IMA conference, Springfield, Missouri, September 2013.
6. R. Pendse, Innovation and Technology, Koch Industries, Innovation Lunch Series, Wichita, Kansas, April 2013.
7. R. Pendse, "What would our world look like if there was no world wide web?" CACUBO Annual Meeting, Tucson, Arizona, September 2012.
8. R. Pendse, "Will We be Relevant Ten Years from Now?" TEDx talk. http://www.youtube.com/watch?v=A_ep6G7XbYo February 2012
9. R. Pendse, "Will We be Relevant Ten Years from Now?" Invited presentation to the Kansas Board of Regents. November 2011.
10. R. Pendse, "Will we be Relevant Ten Years from Now?" How to Reach Our Digital Natives?" CACUBO Annual Meeting, Omaha, Nebraska, October 2011.

11. R. Pendse, "Information Quality and Security in a Web Empowered World," Presentation at American Society on Quality, annual meeting, April 2011.
12. R. Pendse, "Conversations around the world," Presentation at Cessna Aircraft Company diversity team, Wichita, Kansas, August 2010.
13. R. Pendse, "Thinkers, Doers, Movers, and Shockers," Keynote presentation at the convocation to over 4,000 faculty and students at Wichita State University, Wichita, Kansas, August 2010.
14. R. Pendse, "Globalization, Information Technology, and industry collaboration," Presentation to Cisco Systems, London, July 2010.
15. R. Pendse, "Challenges in managing Information Infrastructure," CIO roundtable and discussion, University of Cambridge, Cambridge, United Kingdom, July 2010.
16. R. Pendse, "Advanced Networking Research Center and Research Opportunities," Presentation at Imperial College, London, United Kingdom, August 2010.
17. R. Pendse, "Workforce Development in Information Technology", Topeka, KS. Presentation to Sedgwick County and Johnson County legislative delegations, February 2010.
18. R. Pendse, "Education 3.0 – Is it Technology or is it Culture," Maize High School, Wichita, KS. Presentation to about 150 teachers and counselors January 2009.
19. R. Pendse, "Education 3.0 – Partnership with K - 12," East High School, Wichita, KS. Presentation to about 200 Teachers and Counselors November 2008.
20. R. Pendse, "Experiential Learning," Wichita, KS. Presentation to the Wichita Chamber of Commerce group visiting Advanced Networking Research Center, October 2008.
21. R. Pendse, "Technology – Education 3.0," Faculty of Excellence Luncheon. September 2008.
22. R. Pendse, "Technology – Will We Be Relevant Ten Years from Now," Three hour presentation during the Dean's Retreat. August 2008.
23. R. Pendse, "Effective Teaching – What works for me," Graduate School Orientation for the GTAs. August 2008. **2nd Highest Rated Presentation.**
24. R. Pendse, "Aviation Networks and Engaging Undergraduates in Research," College of Engineering, Polytechnique, University of Milan, Milan, Italy. October 2007.
25. R. Pendse, "Industry-University Collaboration and Faculty Research" College of Technology, Lasalle University, Barcelona, Spain. October 2007.
26. R. Pendse, "Industry-University Collaboration," Free University of Brussels, Brussels, Belgium. October 2007.
27. R. Pendse, "Establishing Research Center with Industry Partners," Budapest Tech, University of Budapest, Hungary. October 2007.
28. R. Pendse, "Cisco Research Center at Wichita State University," Cisco Europe Leadership Team, Brussels, Belgium October 2007.
29. R. Pendse, "Effective Teaching – What works for me," Graduate School Orientation

- for the GTAs. August 2007. **Highest Rated Presentation.**
30. R. Pendse, "Future of the Internet," College of Engineering, Osmania University, Hyderabad, India. April 2007.
 31. R. Pendse, "Challenges and Opportunities await International Students in US," College of Engineering, Osmania University, Hyderabad, India. April 2007.
 32. R. Pendse, "Research Thrusts in Advanced Networking Research Center," College of Engineering, Jawaharlal Nehru Technological University (JNTU), Hyderabad, India. April 2007.
 33. R. Pendse, "Effective Teaching – What works for me," Graduate School Orientation for the GTAs. August 2006. **Highest Rated Presentation.**
 34. R. Pendse, "Cisco Technical Research Center," Best Practices Summit, San Jose, California, July 2006. **My presentation was rated 3rd best among 41 presenters.**
 35. R. Pendse, "Industry University Collaboration," EduCom 2006, Orlando, Florida, June 2006. My presentation received very high evaluations.
 36. R. Pendse, "Future of the Internet and Research Opportunities," IEEE student Branch. Wichita State University, Wichita, Kansas. April 2006.
 37. R. Pendse, "Decision Day" Presentation to the undecided Students, April 2006.
 38. R. Pendse, "Effective Teaching – What works for me," Graduate School Orientation for the GTAs. August 2005. **Highest Rated Presentation.**
 39. R. Pendse, "Role of the Academic Affairs," Psychology Graduate Student Orientation, August 2005.
 40. R. Pendse, "Technology at WSU," New Faculty Orientation, August 2005
 41. R. Pendse, "Decision Day" Presentation to the undecided Students, April 2005
 42. R. Pendse, "SAN Research Ideas," Forensics Educators Working Group Meeting, Orlando, Florida, February 2005.
 43. R. Pendse, "Computer Security Workshop." As the Director of the CTRE I was responsible for organizing this workshop. It was attended by about 75 faculty and staff members. October 2004.
 44. R. Pendse, "Effective Grant Writing Workshop." As the Director of the CTRE I was responsible for organizing this workshop. It was attended by about 60 faculty members. September 2004.
 45. R. Pendse, "New Faculty Orientation." In-charge of new faculty orientation for the university. Organized a one day session which involved many mini sessions on various topics important to the new faculty. August 2004.
 46. R. Pendse, "Effective Teaching - What works for me," All University Graduate Teaching Assistant Orientation and Training Workshop, Wichita State University, Wichita, Kansas. August 2004. **My presentation was the highest rated presentation.**
 47. R. Pendse, "OPNET at Wichita State University," OPNETWORKS 2004, Washington DC, August 2004.

48. R. Pendse, "New Faculty Orientation." In-charge of new faculty orientation for the university. Organized a one day session which involved many mini sessions on various topics important to the new faculty. August 2003.
49. R. Pendse, "Effective Teaching - What works for me," All University Graduate Teaching Assistant Orientation and Training Workshop, Wichita State University, Wichita, Kansas. August 2003. **My presentation was the highest rated presentation.**
50. R. Pendse, "Effective Teaching - Panel discussion." As the CTRE director, I organized a panel discussion which was attended by about 110 faculty members and graduate students.
51. R. Pendse, "SOS, SAS, and CICS1." As the CTRE director, I organized two one hour workshops which were well attended by the faculty. December 2002.
52. R. Pendse, "Does your online course make the grade." As the CTRE director, I organized this satellite broadcast conference which was attended by about 40 faculty members. October 2002.
53. R. Pendse, "New Faculty Orientation." In-charge of new faculty orientation for the university. Organized a one day session which involved many mini sessions on various topics important to the new faculty. August 2002.
54. R. Pendse, "Effective Teaching - What works for me," All University Graduate Teaching Assistant Orientation and Training Workshop, Wichita State University, Wichita, Kansas. August 2002. **My presentation was one of the highest rated by the participants.**
55. R. Pendse, "Tips for Teaching Graduate assistants," All University Graduate Teaching Assistant Orientation and Training Workshop, Wichita State University, Wichita, Kansas. August 2001. **My presentation was one of the highest rated by the participants.**
56. R. Pendse, "Tips for Teaching Graduate assistants," All University Graduate Teaching Assistant Orientation and Training Workshop, Wichita State University, Wichita, Kansas. August 2000. **My presentation was one of the highest rated by the participants.**
57. R. Pendse, "Tips for Teaching Graduate assistants," All University Graduate Teaching Assistant Orientation and Training Workshop, Wichita State University, Wichita, Kansas. August 1999. **My presentation was the highest rated presentation by the participants.**
58. R. Pendse, "Internetworking Fundamentals Workshop" for Raytheon Aircraft. This was a five day workshop which generated \$16,000 for our department. July 1999. I was compensated \$3,217 for my effort.
59. R. Pendse, "Block Replacement Algorithm and Prefetching," Wichita State University, Wichita, Kansas. October 1998. This was a presentation made to the faculty and students of our department as part of our annual seminar series.

60. R. Pendse, "Tips for Non-Teaching Graduate Assistants," All University Graduate Teaching Assistant Orientation and Training Workshop, Wichita State University, Wichita, Kansas. August 1998.
61. R. Pendse, "Effective Teaching Panel Discussion," Presentation to the faculty members attending ASEE Midwest Conference, Salina, Kansas. August 1998.
62. R. Pendse, "Block Replacement Strategies for Disk Cache," University of Kansas, Lawrence, Kansas. March 1998. This was an invited presentation as part of spring Colloquium at KU. According to KU documents, the spring colloquium is designed to bring to the campus a group of distinguished leaders in science and engineering.
63. R. Pendse, "Effective Teaching" Kansas State University, Salina. This was an invited presentation to the Kansas State University faculty on Effective Teaching Methods. November 1997.
64. R. Pendse and R. Armstrong, "A review of workshop on preparing graduate students to teach," Graduate Coordinators Meeting, Wichita State University, Wichita, Kansas. September 1997.
65. R. Pendse, "Fundamentals of Effective Teaching," Kansas Industry University Government Engineering Education Consortium, New Faculty Workshop, Emporia State University, Emporia, Kansas. **My presentation received the highest rating among all the presentations.** September 1997.
66. R. Pendse, "Tips for Non-Teaching Graduate Assistants," All University Graduate Teaching Assistant Orientation and Training Workshop, Wichita State University, Wichita, Kansas. August 1997.
67. R. Pendse, "Engineering Your Future Options" Engineering Summer Camp, College of Engineering, Wichita State University, Wichita, Kansas. July 1997. **My Presentation received the highest rating among all the presentations.**
68. R. Pendse, "Preparing Graduate Students To Teach: A Workshop at Stanford." I was a participant in this three day workshop. Stanford University, Palo Alto, California. July 1997
69. R. Pendse and U. Walterscheidt, "Block Replacement Algorithms," Kansas State University, Manhattan, Kansas. April 1997. This was an invited presentation to the students and faculty of KSU
70. R. Pendse, "National Teaching Effective Institute Workshop." I was a participant in this workshop. Washington, D.C. June 1996.

GRADUATE STUDENTS ADVISED

I am very active in graduate education. To date, I have advised to completion **9 PhD** students), **90 MSEE (Thesis)** students, and **160 MSEE (Project)** students. Most of these students are now employed in the Computer and Networking and security industry for companies such as Cisco Systems, Intel, Juniper Networks, Palo Alto Networks, Amazon and others. I am currently co-advising 1 PhD students and 2 MSEE (thesis) students.

COURSES DEVELOPED

Brown University

Engr 0931: Internet of Everything

Wichita State University

ECE 877G: Introduction to Storage Area Networks.

ECE 844: Advanced Computer Architecture I.

ECE 894: Advanced Computer Architecture II.

ECE 744: Introduction to VHDL.

ECE 194: Introduction to Digital Design.

ECE 294: Digital Design Techniques.

ECE 764: Routing and Switching I

ECE 765: Routing and Switching II

ECE 864: Multi Service over IP

PROFESSIONAL ACTIVITIES AND HONORS

March 2013: **Distinguished Gentleman award**, WSU Women's Association. Honored during the annual scholarship event.

December 2009: **Mortar Board, Honorary member**, inducted during the half time of the WSU basketball game.

April 2007: **GRASP faculty advisor recognition**, Second place winning presentation in the non-oral division.

March 2006: Profiled in IEEE communication magazine by OPNET. **One of the nine educators profiled by OPNET in the world.**

February 2006: **Senior member of the IEEE**. Only 7.3% of the members (400,000 total members) currently hold this rank.

October 2005: **Best Paper of the Session**, 24th Digital Avionics Systems Conference, Crystal City, VA.

July 2005: Certificate of Appreciation from **Ronald E. McNair** Post-Baccalaureate Achievement Program.

April 2005: **GRASP faculty advisor recognition**, third place winning presentation in the oral division.

October 2004: **Best Paper of the Conference, Best Paper of the Session, and Best Paper of the Track**, 23rd Digital Avionics Systems Conference, Salt Lake City, UT.

August 2003: **Senior NIAR Fellow**, National Institute of Aviation Research

April 2003: **Outstanding Educator Award**, Excellence in Continuing Education, College of Engineering, Wichita State University.

March 2001: **Academy of Effective Teaching Award**, Wichita State University. Awarded during the honors convocation. This is a University wide teaching award.

August 2000: **Cisco Fellow**, Wichita State University.

April 1999: **DOW Outstanding New Faculty Award**, American Society of Engineering Education, Midwest Section.

April 1999: **Outstanding Educator Award**, Excellence in Teaching, College of Engineering, Wichita State University.

May 1998: **Educator Appreciation Award**, Mortar Board, Wichita State University.

July 1998: **Outstanding ASEE Campus Representative Award** for Zone III, ASEE National Conference, Seattle, WA.

July 1998: **Outstanding ASEE Campus Representative Award** from ASEE National office, ASEE National Conference, Seattle, WA.

April 1994: **Second Place Engineering Division Paper Award**, ASEE Midwest Section Meeting, Lincoln, NE.

April 1990: **Professor of the Year** in the College of Engineering, Northern Arizona University from Tau Beta Pi, The National Engineering Honor Society.

February 1990: **Exemplary Teacher Award** from Northern Arizona University. Represented NAU in the Exemplary Teachers forum during the AAHE conference.

May 1989: **Outstanding Graduate Student Teacher Award** from the College of Engineering, Wichita State University.

1988 – 1989: Who’s Who among Students in American Universities.

November 1988: Certificate of Appreciation from Tau Beta Pi for conducting EIT review sessions.

December 1988: Certificate of Appreciation from Eta Kappa Nu for designing Digital Kit for use in Digital design classes.

Honor Societies: Member, Tau Beta Pi, Eta Kappa Nu, and Pi Mu Epsilon

2005 – Present Senior Member, IEEE

1984 - 2005 Member, IEEE

1995 - 1998 Member, Faculty Support Committee

1997 - 2000 Member, WSU Committee on Diversity and Multiculturalism

1994 - 1999 Member, President Hughes Committee on Student Recruitment and Retention

1990 – 2011 Advisor, Tau Beta Pi

1994 - 2000 Chair, Student Fee Committee

1997 - 2005 Campus Representative, ASEE

2000 – 2002 Midwest Section Campus Representative, ASEE