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Education:

- Ph.D., Computer Science, University of Minnesota, 1992.
- M.S., Computer Science, North Dakota State University, 1986.
- B.S., Computer Science, North Dakota State University, 1984.
- B.S., Mathematics, North Dakota State University, 1984.

Administrative and Leadership Positions:

- Founding Dean, College of Science and Engineering, University of North Carolina Wilmington, July 2023-present.
- Associate Provost for Research and Dean of the Graduate School, University of North Carolina Wilmington, January 2013-June 2018.
- Editor-in-Chief, Computer, the flagship publication of the IEEE Computer Society, 2011-2014.
- Co-Founder and Chief Executive Officer, Mobile Education LLC, Wilmington, NC, 2007-2017.
- Co-Founder and Chief Operations Officer, PowerPlay Mobile LLC, Wilmington, NC, 2010-2017.
- Director and Graduate Coordinator, Master's in Computer Science and Information Systems Program, University of North Carolina Wilmington, 2006-2011 and 2020-2022.
- Department Chair, Computer Science Department, University of North Carolina Wilmington, 2000-2005.
- Assistant Chair, Computer Science Department, University of North Carolina Wilmington, 1998-2000.
- Director, Computer Systems Institute, North Dakota State University, Fargo, 1995-1996.

Faculty and Teaching Experience:

- Professor, Computer Science Department, University of North Carolina Wilmington, 2000-present.
- Associate Professor, Computer Science Department, University of North Carolina Wilmington, 1996-2000.
- Assistant Professor, Computer Science Department, North Dakota State University, Fargo, 1994-96.
- Assistant Professor, Mathematical Sciences Dept., University of North Carolina Wilmington, 1993-94.
- Assistant Professor, Comp. Sci. & Info. Sys. Dept., Minnesota State University at Moorhead, 1992-93.
- Teaching Assistant, Computer Science Department, University of Minnesota, Minneapolis, 1988-92.
- Teaching Assistant, Computer Science Department, North Dakota State University, Fargo, 1984-86.

Principal Areas of Research Interest:

- Computer and Network Security
- Digital Forensics
- Parallel and Distributed Systems
- Technology Commercialization
- Web Application/Systems Development

Journal, Magazine, and Conference Publications:

129. Generative AI and the Future of Software Testing – A Virtual Roundtable, with L. Layman, Computer, Vol. 57, No. 1, January 2024, pp. 27-32.

128. Outlook 2024, with J. Voas, Computer, Vol. 57, No. 1, January 2024, pp. 18-21.

127. Security Issues for the Internet of Drones, Computer, Vol. 56, No. 2, February 2023, pp. 4-5.

126. Outlook 2023, with J. Voas, Computer, Vol. 56, No. 1, January 2023, pp. 16-18.

125. A Cloud-based System for Scraping Data from Amazon Product Reviews at Scale, with R. Woodall, D. Kline, and M. Modaresnezhad, Journal of Information Systems Applied Research, 15(3), pp. 24-34, October 2022. (A preliminary version appears in the Proceedings of CONISAR 2021).

124. Preparation for a Cybersecurity Apprenticeship Program (PCAP), with J. Lancelot, G. Stoker, G. Smith, C. Nichols, U. Clark, and W. Wetherill, Cybersecurity Pedagogy and Practice Journal, Volume 1, No. 1, July 2022, pp. 29-39. (A preliminary version appeared in the Proceedings of the EDSIG Conference on Information Systems & Computing Education, Washington, DC, November 3-6, 2021).

123. Cybersecurity Best Practices for CISE Programs, with A. Sobel, Computer, Vol. 55, No. 5, May 2022, pp. 64-72.

122. Selecting Subsets of Amazon Reviews, with Y.E. Gokce, D. Kline, and J. Cummings, Proceedings of the Conference on Information Systems Applied Research (CONISAR), Washington, DC, November 3-6, 2021.

121. Verifying Phishmon: A Framework for Dynamic Webpage Classification, with J. Tomaselli, A. Willoughby, J. Vargas Amezcua, E. Delehanty, K. Floyd, D. Wright, and M. Lammers, Proceedings of the 2021 ACM Southeast Conference, April 15–17, 2021, https://doi.org/10.1145/3409334.3452082.

120. Understanding Campus Crime with a Multi-University Analytics System, with U. Iheadindu, D. Kline, and U. Clark, Journal of Information Systems Applied Research, 13(3), pp. 21-28, November 2020. (A preliminary version appears in the Proceedings of CONISAR 2019).

119. Literary Analysis Tool: Text Analytics for Creative Writers, with A. Grimsman, D. Kline, and C. Guinn, Journal of Information Systems Applied Research, 13(1), pp. 32-26, March 2020. (A preliminary version appears in the Proceedings of CONISAR 2019).

118. Looking Ahead to CAE-CD Program Changes, with U. Clark and G. Stoker, Information Systems Education Journal, Vol. 18, No. 1, February 2020. (A preliminary version appeared in the Proceedings of the EDSIG Conference on Information Systems & Computing Education, 2019).

117. Which Amazon Reviews Should You Read?, with E. Gokce, D. Kline, and J. Cummings, Proceedings of the Conference on Information Systems Applied Research, Vol. 12, No. 5252, Cleveland, OH, November 6-9, 2019.

116. The Web We Look Forward To – Roundtable Discussion, with S. Murugesan, Computer, Vol. 48, No. 5, May 2015, pp. 44-50.

115. The Web: The Next 25 Years - Guest Editor's Introduction, with S. Murugesan, Computer, Vol. 48, No. 5, May 2015, pp. 14-17.

114. Technology Commercialization in the Innovation Economy - Guest Editor's Introduction, Computer, Vol. 47, No. 8, August 2014, pp. 20-21.

113. Digital Magazines: The Future of Publishing is Here, Computer, Vol. 47, No. 1, January 2014, pp. 6-7.

112. Dine Healthy Mobile: An Implementation of an HTML5 Mobile WebApp, with Forsythe, A., Kline, D., Dennison, D., and Nobles, R., Annals of the Master of Science in Computer Science and Information Systems at UNC Wilmington, 2013.

111. ArcGIS Server: An Application Migration, Application Template Construction and Server Analysis & Design for the University of North Carolina Wilmington Department of Geography & Geology, Caldwell, A., Kline, D., Reinicke, B., and Halls, J., Annals of the Master of Science in Computer Science and Information Systems at UNC Wilmington, 2013.

110. Investigating Privacy and Security Challenge of mHealth Applications, with Mitchell, S., Ridley, S., Tharenos, C., Varshney, U., and Yaylacicegi, U., Proceedings of the Nineteenth Americas Conference on Information Systems, Chicago, IL, August 15-17, 2013.

109. Information Security Blueprint, with Yaylacicegi, U., Benli, S., and Mitchell, S. A., Journal of Information Systems Applied Research, 6(4) pp. 14-30. http://jisar.org/2013-6/ ISSN: 1946-1836. (A preliminary version appears in the Proceedings of CONISAR 2012).

108. Building an Effective Interdisciplinary Professional Master's Degree, with Kline, D. M., and Barnhill, K, Information Systems Education Journal, 11(6) pp. 40-49. http://isedj.org/2013-11/ ISSN: 1545-679X. (A preliminary version appears in The Proceedings of EDSIGCON 2012).

107. Creating an Audio-Conferencing Application on Android Smart Phones, with Sun, J., and Reinicke, B., Journal of Information Systems Applied Research, 6(2) pp. 4-21. http://jisar.org/2013-6/ ISSN: 1946-1836. (A preliminary version appears in the Proceedings of CONISAR 2012).

106. Embracing Digital Publishing, Computer, Vol. 46, No. 1, January 2013.

105. Medication Adherence for Patients with Mental Illness, with U. Varshney, Poster Presentation at the 34th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC'12), San Diego, CA, August 28 - September 1, 2012.

104. CMobile: A Mobile Photo Capture Application for Construction Imaging, with Martin, A., Brown, J., and Janicki, T., Journal of Information Systems Applied Research, 5(4) pp. 55-68. http://jisar.org/2012-5/ ISSN: 1946-1836. (A preliminary version appears in the Proceedings of CONISAR 2011).

103. Building a Real-Time Bus Tracking Data Display System, with Dudley, J., Brown, J., and Janicki, T., Journal of Information Systems Applied Research, 5(2) pp. 38-50. http://jisar.org/2012-5/ ISSN: 1946-1836. (A preliminary version appears in the Proceedings of CONISAR 2011).

102. Digital Computer: The Next-Generation Flagship Publication, Computer, Vol. 45, No. 1, January 2012.

101. Challenges and Opportunities in Mobile Web and App Development - Guest Editor's Introduction, Computing Now, Nov. 2011. Web- http://www.computer.org/portal/web/computingnow/archive/november2011

100. Entrepreneurship and Innovation - Guest Editor's Introduction, Computing Now, April 2011. Web - http://www.computer.org/portal/web/computingnow/archive/april2011

99. On the Design and Implementation of Interactive XML Applications, with J. Brown, R. Brown, and C. Velado, International Journal of Information Retrieval Research, Vol. 1, No. 1, Jan-Mar 2011, pp. 19-30.

98. Print, Mobile, and Online, Computer, Vol. 44, no 1, January 2011, pp. 9-11.

97. A Look at Mobile Device Security, with P. Whisenhunt, Cutter IT Journal, Vol. 23, No. 9, September 2010, pp. 22-27.

96. Rez-O-Lution: A Ticket Management System for the Office of Housing and Residence Life at the University of North Carolina Wilmington, with Cotton, C., Kline, D., Janicki, T., Laymon, C., Annals of the Master of Science in Computer Science and Information Systems at UNC Wilmington, 2010.

95. iTour: A System for Self-Guided Virtual Campus Tours, with C. Alvarez, D. Kline, and B. Reinicke, Proceedings of the International Conference on Wireless Networks (ICWN '10), Las Vegas, NV, July 12-15, 2010.

94. XML Interactive: A Software Framework for Developing Interactive SMS Applications, with J. Brown and C. Velado, Proceedings of the International Conference on Internet Computing (ICOMP '10), Las Vegas, NV, July 12-15, 2010.

93. Authentication by Biometric Verification - Guest Editor's Introduction, Computer, Vol. 43, No. 2, February 2010, pp. 28-29.

92. Biometrics - Guest Editor's Introduction, with K. Ricanek, Computing Now, February 2010. Web - http://www.computer.org/portal/web/computingnow/archive/february2010

91. Building Mobile Phone Applications, Journal of Computing Sciences in Colleges, Consortium for Computing Sciences in Colleges, Volume 25 Issue 2, December 2009.

90. Flexibility is Key for SMS Coupons, with J. Brown, Mobile Marketer's Classic Guide to Mobile Advertising, www.mobilemarketer.com, August 14, 2009, pp. 49.

89. Majoring in a Virtual Environment: Merging CS and IS into IT, with L. Patterson, T. Janicki, and B. Reinicke, Proceedings of the 2009 International Conference on Frontiers in Education: Computer Science and Computer Engineering (FECS '09), Las Vegas, NV, July 13-16, 2009.

88. Professional Ethics - Guest Editor Introduction, Computing Now, July 2009. Web - http://www.computer.org/portal/web/computingnow/archive/july2009

87. Enhancing Mobile Access to Information with the Short Message Service, with J. Brown and D. Saunders White, Journal of Computing in Higher Education, Vol. 20, No. 2, November 2008, pp. 24-34.

86. On the Design and Implementation of a System Integrating Outlook Mobile Services with the Short Message Service, with S. Border and J. Brown, Proceedings of the 2008 International Conference on Wireless Networks (ICWN'08), Las Vegas, NV, July 14-17, 2008, pp. 579-585.

85. SMS: Short Message Service, with J. Brown and B. Shipman, Computer, Vol. 40, No. 12, December 2007, pp. 106-110.

84. Extending GridNexus to Support the Visual Assembly of Web Services, with E. Harris and J. Brown, Proceedings of the International Joint Conferences on Computer, Information, and Systems Sciences, and Engineering (CISSE 07), December 3-12, 2007 (reprinted in Innovations and Advanced Techniques in Systems, Computing Sciences, and Software Engineering, Khaled Elleithy, Editor, Springer 2008).

83. Interactive Services on Mobile Devices for Higher Education, with J. Brown, R. Hoon, and D. Saunders-White, Proceedings of the 2007 Educause Conference, Seattle, Washington, October 23-26, 2007.

82. Parallel Processing with GT4, with J. Brown, M. Freeze, and E. Harris, Poster Presentation at the International Conference on the Virtual Computing Initiative (ICVCI 2007), Research Triangle Park, North Carolina, May 7-8, 2007.

81. Metadata Lessons Learned from the iLumina Digital Library, with B. Heath, D. McArthur, and M. McClelland, *Communications of the ACM*, Vol. 48, No. 7, July 2005.

80. Project Numina: Enhancing Student Learning with Handheld Computers, with B. Heath, R. Herman, G. Lugo, J. Reeves, and C. Ward, Computer, Vol. 38, No. 6, June 2005, pp. 46-53.

79. GridNexus: A Grid Services Scientific Workflow System, with J. Brown, C. Ferner, T. Hudson, A. Stapleton, A. Martin, J. Martin, A. Rawls, W. Shipman, and M. Wood, International Journal of Computer & Information Science, Vol. 6, No. 2, June 2005.

78. On the Design and Implementation of a Location-Aware Campus-Based Computing Infrastructure, with E. Dunn, Poster Presentation at the 2005 UNC Teaching and Learning with Technology Conference, Raleigh, NC, March 30, 2005.

77. A Mobile Learning Environment to Support a Virtual Education Community in Science and Mathematics, with B. Heath, R. Herman, G. Lugo, J. Reeves, and C. Ward, Technological Horizons in Education Journal, Vol. 32, No. 8, March 2005.

76. Integrating Digital Libraries with Traditional Libraries: Collaborating for Sustainability, with D. Pfohl and D. Ward, Poster Presentation at the NSF NSDL Workshop, Chicago, IL, November 15-17, 2004.

75. Integrating Digital Libraries with Traditional Libraries: A Model for Sustaining NSDL Collections, with S. Cody and D. Ward, Poster Presentation at the NSF NSDL Workshop, Washington, DC, October 12-14, 2003.

74. An Integrated Framework for Implementing Quality of Network Concepts, with C. Ferner, *Journal of Network and Systems Management*, Vol. 10, No. 4, December 2002.

73. Course Notes #48 - Dynamic Media on Demand: Exploring Wireless and Wired Streaming Technologies and Content, with T. Rhyne, L. Bishop, D. Holmes, and A. Turner, *Proceedings of the 29th International Conference on Computer Graphics and Interactive Techniques (SIGGRAPH '02)*, San Antonio Conference Center, July 21-26, 2002.

72. Mobile Commerce: Framework, Applications, and Networking Support, with U. Varshney, *ACM/Baltzer Journal on Mobile Networks and Applications (MONET),* Special Issue on Mobile Commerce, Vol. 7, June 2002, pp.185-198.

71. Guest Editor's Introduction, with U. Varshney, *Journal of Mobile Networks and Applications*, Special Issue on Mobile Commerce, Vol. 7, No. 3, June 2002.

70. A Multicast Tree Construction Algorithm for Large Multiparty Conferences, with P. Juell and D. Brekke, *Journal of Telecommunication Systems*, Vol. 17, No. 3, July 2001.

69. A Collaborative Approach for Creating Curriculum and Instructional Materials, with S. Sologuk and R. Stammen, *Journal of Technology and Teacher Education (JTATE)*, Vol. 9, No. 2, June 2001, pp. 199-210.

68. Towards a Sharable Digital Library of Reusable Teaching Resources: Roles for Rich Metadata, with D. McArthur, B. Graves, S. Giersch, D. Ward, R. Dillaman, R. Herman, G. Lugo, J. Reeves, D. Knox, and S. Owen, *Communications of the ACM*, Special issue on Digital Libraries, Vol. 44, No. 5, May 2001.

67. Guest Editor's Introduction, with A. Weaver and K. Swigger, *Decision Support Systems Journal*, Special Issue on E-Commerce, Vol. 31, No. 3, 2001.

66. Teaching and Learning in the Wireless Classroom, with P. Shotsberger, *Computer*, Vol. 34, No. 3, March 2001.

65. The Wireless Worldwide Web, *Communications of the ACM*, Invited Essay on the future of computing, Vol. 44, No. 3, March 2001.

64. A Framework for Emerging Mobile Commerce Applications, with U. Varshney, *Proceedings of the 34th Hawaii International Conference on System Sciences (HICSS-34),* Maui, Hawaii, January 3-6, 2001.

63. Mobile E-commerce: A New Frontier, with U. Varshney and R. Kalakota, *Computer*, Special Issue on E-commerce, Vol. 33. No. 10, October 2000.

62. The Future of E-Commerce, with A. Weaver, A. Whinston, and K. Swigger, Guest Editor's Introduction, *Computer*, Special Issue on E-commerce, Vol. 33, No. 10, October 2000.

61. The Handheld Web: How Mobile Wireless Technologies Will Change Web-Based Instruction and Training, with P. Shotsberger, *Educational Technology*, Vol. XL, No. 5, September-October 2000, pp.49-52.

60. Emerging Mobile and Wireless Networks, with U. Varshney, *Communications of the ACM*, Vol. 43, No. 6, June 2000, pp. 73-81 (reprinted online in the June 2000 issue of *iMP: The Magazine on Information Impacts*, http://www.cisp.org/imp).

59. An International Distance Learning Nursing Course: Nursing in the US and Japan, with Yeoun Soo Kim, *Journal of Cultural Diversity*, Special Issue on International Education, Vol. 6, No. 2, Summer 1999, pp. 48-56 (reprinted in the *2001 IMIA Yearbook of Medical Informatics*, Schattauer Publishing Company, 2001).

58. Network-based Professional Development: A Comparison of Statewide Initiatives, with P. Shotsberger, R. Stammen, G. Blue, and E. Greer, *Proceedings of the World Conference on the WWW and Internet (WebNet '99)*, Honolulu, Hawaii, October 25-30, 1999.

57. Distance Learning Design/Model (DLD/M) Project, *Proceedings of the Third UNC Workshop on the Use of Technology for Distance Education*, North Carolina State University, Raleigh, NC, September 22-23, 1999.

56. Web-Based Enterprise Computing, *Computer*, Vol. 32, No. 5, May 1999.

55. Entrepreneurial Creation of High-Quality Distributed Learning Courses at the University of North Carolina at Wilmington, with P. Turrisi, J. Brown, C. Ward, J. Wilson, M. Albert, and C. Kearsley, *Paper/Panel Presentation at the 38th Annual Conference of the Association of General and Liberal Studies*, St. Louis, Missouri, October 15-17, 1998.

54. Developing Fifteen Online Courses in 140 Days!, with C. Ward and G. Lugo, *Proceedings of the Second Annual UNC Workshop on the Use of Technology for Distance Education*, North Carolina State University, Raleigh, NC, September 16-17, 1998.

53. Building Video-on-Demand Servers, with D. Du, J. Hsieh, and J. Liu, *Journal of Telecommunication Systems*, Special issue on Multimedia, Baltzer Science Publishers, Vol. 9, Nos. 3-4, September 1998.

52. The Counter-Based Congestion Avoidance Scheme for ABR Traffic in ATM Networks, with H. Choi and K. Nygard, *Proceedings of the 1998 IEEE International Performance, Computing, and Communications Conference*, Phoenix/Tempe, AZ, February 16-18, 1998.

51. The Internet in the Year Ahead, with K. Kroeker, *Computer*, Vol. 31, No. 1, January 1998.

50. Developing an Online Web-based Course*, Poster Presentation at the World Conference of the WWW, Internet, and Intranet (WebNet '97)*, Toronto, Canada, November 1-5, 1997.

49. Web-Based Education Experiences, with C. Severance, *Computer*, Vol. 30, No. 11, November 1997.

48. Developing an Online Internet-based Course*, Proceedings of the First Annual UNC Workshop on the Use of Technology for Distance Education*, North Carolina State University, Raleigh, NC, September 24-25, 1997.

47. Liveness Testing for Video Conferencing on the Internet, with R. Hulm and D. Brekke, *Proceedings of the 30th Annual Small College Computing Symposium (SCCS '97),* Kenosha, Wisconsin, April 17-19, 1997.

46. Web-based Teacher Professional Development: Current Implementations and Future Prospects, with P. Shotsberger, R. Stammen, M. Nelson, and Linda Baker*, Technology and Teacher Education Annual of the Society for Information Technology and Teacher Education (SITE '97)*, Orlando, Florida, April 1-5, 1997.

45. Asynchronous Transfer Mode: An Emerging Network Standard for High-Speed Communications, Book Chapter in *Advances in Computers*, Volume 44, Academic Press, March 1997.

44. Web Publishing: No HTML Expertise Needed, *Computer*, Vol. 30, No. 2, March 1997.

43. A Method for Answering Queries over Future High-Speed Networks, with W. Perrizo, A. Duggal, Z. Zhang, and S. Krebsbach, *Proceedings of the ISCA 9th International Conference on Computer Applications in Industry and Engineering (CAIN)*, Orlando, Florida, December 11-13, 1996.

42. Evaluation of Computer Conferencing Tools for Conducting Collaborative Seminars on the Internet, with P. Juell, D. Brekke, and J. Wasson, *International Journal of Educational Telecommunications,* Vol. 2, No. 4, pp. 233-248, December 1996.

41. Survey of Congestion Control Schemes for ABR Traffic in ATM Networks, with H. Choi, *Data Communications Management,* Auerbach Publications, October 1996.

40. TM-LAB: An Experimental Program for Viewing and Investigating Thematic Mapper Imagery on the PC, with J. Sanchez, M. Canton, W. Perrizo*, Poster Presentation at the Pecora 13 Symposium*, EROS Data Center, Sioux Falls, South Dakota, August 19-22, 1996.

39. Analysis of Variable Bit Rate Traffic Using MPEG-1 Over ATM Networks, with Y. Chua, *NDSU Workshop on ATM Networking*, August 7-9, 1996.

38. Choosing Optimal Network Parameters for Effective Congestion Control in ATM Networks, with H. Choi, *NDSU Workshop on ATM Networking*, August 7-9, 1996.

37. Some Aspects of Distributed Database Management in High-Speed Network Environments, with S. Junnuru and W. Perrizo, *Proceedings of the 11th International Conference on Systems Engineering (ICSE '96)*, Las Vegas, Nevada, July 9-11, 1996.

36. A Multimedia System for Asynchronous Collaboration Using the Multicast Backbone and the World Wide Web, with C. Jonalagada, *Proceedings of the 1st Annual Conference on Emerging Technologies and Applications in Communications*, Portland, Oregon, May 7-10, 1996.

35. Pioneering on the New Frontiers of Education, with T. Krile and P. Juell, Internet Kiosk, *Computer,* Vol. 29, No. 5, May 1996.

34. North Dakota State University's World Wide Web Instructional Project, with P. Juell, J. Ross, V. Tareski, T. Krile, and N. Lilleberg*, Proceedings of the 29th Annual Small College Computing Symposium (SCCS '96),* St. Cloud University, St. Cloud, MN, April 18-20, 1996.

33. Design Criteria for Offering a College Course in an Interactive Computer Mediated Communication Environment (CD-ROM based), with J. Wasson, D. Brekke, and P. Juell*, Proceedings of the 29th Annual Small College Computing Symposium (SCCS '96)*, St. Cloud University, St. Cloud, MN, April 18-20, 1996.

32. Scalability of the MBone, with D. Brekke and P. Juell*, Proceedings of the 29th Annual Small College Computing Symposium (SCCS '96)*, St. Cloud University, St. Cloud, MN, April 18-20, 1996.

31. Emerging Technologies for Distance Education, with V. Tong and P. Juell*, Proceedings of the 29th Annual Small College Computing Symposium (SCCS '96),* St. Cloud University, St. Cloud, MN, April 18-20, 1996.

30. Building Video-on-Demand Servers Using Shared-Memory Multiprocessors, with D. Du, J. Hsieh, and J. Liu, *University of Minnesota Supercomputer Institute Research Report, UMSI 96/37*, Minneapolis, Minnesota, March 1996.

29. Computer-Controlled Devices Reach the Internet, Internet Kiosk, *Computer*, Vol. 28, No. 12, December 1995.

28. Using Color and Text in Projecting Multimedia Presentations, with C. Ward and S. Shapiro, *IEEE Multimedia*, Vol. 2, No. 4, Winter 1995, December 1995.

27. Integrating Interactive Graphics Techniques with Future Technologies, with T. Rhyne, E. Gidney, T. Imielinski, and P. Maes, *Proceedings of the 22nd International Conference on Computer Graphics and Interactive Techniques (SIGGRAPH '95)*, Los Angeles, California, August 6-11, 1995.

26. Accessing Earth System Science Data and Applications through High-Bandwidth Networks, with M. Ali, et. al., *IEEE Journal on Selected Areas in Communications*, Special issue on Applications Enabling the Large-Scale Deployment of Gigabit Networks, Vol. 13, No. 5, June 1995.

25. Softbots, Knowbots, and Whatnots, Part of article on Where is Software Headed?, *Computer*, Vol. 28, No. 8, August 1995.

24. Logistics of Running a Collaborative Multimedia Seminar over the Internet, with P. Juell, D. Brekke, and J. Wasson*, Proceedings of the 28th Small College Computing Symposium (SCCS '95),* Augustana College, Sioux Falls, SD, April 20-21, 1995.

23. Evaluation of Computer Conferencing Tools for Conducting Collaborative Seminars on the Internet, with P. Juell, D. Brekke, and J. Wasson, *Proceedings of the 28th Small College Computing Symposium (SCCS '95)*, Augustana Collage, Sioux Falls, SD, April 20-21, 1995.

22. Design Principles for Multi-Hop Wavelength and Time Division Multiplexed Optical Passive Star Networks, with S. Tong and D. Du, *Journal of High-Speed Networks*, Vol. 4, No. 2, March 1995.

21. ATM Concepts, Architecture, and Protocols, *Communications of the ACM*, Special Issue on ATM Networks, Vol. 38, No. 2, February 1995.

20. Mosaic and the World Wide Web, with C. Spell and C. Ward, *Computer*, Vol. 27, No. 10, October 1994 (reprinted in Japanese and published in the February 1995 issue of *Nikkei Electronics*).

19. Videoconferencing on the Internet, Hot Topics, *Computer*, Vol. 28, No. 1, January 1995.

18. Storage and Network Requirements of a Low-Cost, Computer-Based Virtual Classroom, with P. Juell, D. Brekke, and J. Wasson, *Journal of Computing and Information Technology*, Vol. 2, No. 4, December 1994.

17. Virtual Classroom Easier Than You Think!, Open Channel, *Computer*, Vol. 27, No. 6, June 1994 (reprinted in Spanish and published in the Fall/Winter 1995 issue of the LANIA Newsletter).

16. Experiences with Projected Multimedia Presentations, with C. Ward and S. Shapiro, Association for Applied Interactive Multimedia, *Proceedings of the Third Annual Conference on Multimedia in Education and Industry (AAIM '94)*, Charleston, SC, July 24-26, 1994.

15. Research Issues in Multimedia Database Management Systems, *Proceedings of the Second Annual Mid-Continent Information and Database Systems Conference*, North Dakota State University, Fargo, ND, May 22-24, 1994.

14. The Design of a Remote, Low-Cost, Multimedia Classroom, with P. Juell, D. Brekke, and J. Wasson, *Proceedings. of the 27th Small College Computing Symposium (SCCS '94),* Winona State University, Winona, MN, April 29-30, 1994.

13. The Design and Implementation of an Electronic Distance Learning System Using Electronic Mail and a Network Presentation System (Mosaic), with P. Juell, D. Brekke, and J. Wasson, *Proceedings of the 27th Small College Computing Symposium (SCCS '94)*, Winona State University, Winona, MN, April 29-30, 1994.

12. A Network Architecture for Distributed High Performance Heterogeneous Computing, with S. Bhattacharya, D. Du, A. Pavan, S. Tong, and K. Williams, *Proceedings of the 8th International Parallel Processing Symposium Workshop on Heterogenous Computing (IPPS '94)*, Cancun, Mexico, April 26-29, 1994.

11. Electronic Timekeeping, with A. Manager and G. Wawers, *NACUBO Business Officer*, Vol. 27, No. 6, December 1993.

10. The Design and Implementation of a Computerized Presentation System for a Classroom Using an X Cluster, *Technical Report: NDSU-CSOR-TR9311*, with P. Juell, D. Brekke, T. Gibbons, and J. Wasson, August 1993.

9. Communication Networks: Present and Future, *Proceedings of the First Annual Mid-Continent Information Systems Conference (MISC-93)*, North Dakota State University, Fargo, ND, May 3-4, 1993.

8. The CM-2 Data Transposition Problem, with D. Du and A. Kleitz, *Proceedings of the Seventh International Parallel Processing Symposium (IPPS '93),* Newport Beach, CA, April 13-16, 1993.

7. Distributed Computing with High-Speed Optical Networks, with D. Du, *Computer*, Vol. 26, No. 2, February 1993.

6. Network Architectures for High Performance Computing Environments, *Ph.D. Dissertation*, University of Minnesota, June 1992.

5. Network Supercomputing, with D. Du and A. Klietz, *IEEE Network*, Vol. 6, No. 3, May 1992.

4. Network Supercomputing: Experiments with a CRAY-2 to CM-2 HIPPI Connection, with D. Du and A. Kleitz, *Proceedings of the 6th International Parallel Processing Symposium (IPPS '92) Workshop on Heterogeneous Processing*, Beverly Hills, CA, March 23-26, 1992.

3. Topological Design of Optically Switched WDM Networks, with D. Du and K. Williams, *Proceedings of the 16th Conference on Local Computer Networks*, Minneapolis, MN, October 14-17, 1991.

2. A Dynamic CSMA/CD-Based Protocol Using Alternating Persistence, with D. Du, *University of Minnesota Computer Science Department Technical Report (TR89-30)*, April 1989.

1. A Background Task Scheduler for MS-DOS, *M.S. Thesis*, North Dakota State University, September 1986.

Invited Talks and Public Presentations:

- Quantum Leap – Ideas into Practice, Conversations with IEEE Computer Society Major Award Recipients, IEEE International Conference on Quantum Computing and Engineering, Bellevue, WA, September 19, 2023.
- Verifying Phishmon: A Framework for Dynamic Webpage Classification, with J. Tomaselli, Conference Presentation at the 2021 ACM Southeast Conference, April 15–17, 2021.
- Preparing for Crisis Communications, with K. DePauw and A. Hurd, 2016 Council of Graduate Schools 56th Annual Meeting, Washington, DC, December 7-10, 2016.
- University Transportation Issues, with J. Brown and M. Matheny, 2013 North Carolina Public Transportation Association Conference and Expo, Wilmington, NC, April 8-9, 2013.
- A Faculty-Created Startup for Mobile Apps, ACM Distinguished Lecture, Loyola University, Chicago, IL, November 14, 2012.
- Building Mobile Phone Applications, ACM Distinguished Lecture, Duke University, Durham, NC, September 25, 2012.
- University Innovation Council, with J. Magnus, UNCW Board of Trustees Meeting, Wilmington, NC, April 19, 2012.
- Building Mobile Phone Applications, Colloquium for Instructional Technology Program, UNCW, Wilmington, NC, March 8, 2012.
- Building Mobile Phone Applications, ACM Distinguished Lecture, North Dakota State University, Fargo, ND, September 14, 2011.
- Mobile Devices: Security Concerns, with P. Mazzola, Workshop Presentation at the 2011 Wilmington Information Technology eXchange Conference, UNCW, Wilmington, NC, April 7, 2011.
- Building Mobile Phone Applications, Colloquium for Instructional Technology Program, UNCW, Wilmington, NC, March 24, 2011.
- Building Mobile Phone Applications, ACM Distinguished Lecture, Keynote address at the University of Iowa Computing Conference, University of Iowa, Iowa City, February 25, 2011.
- iTour: A System for Self-Guided Virtual Campus Tours, with C. Alvarez, D. Kline, and B. Reinicke, 2010 International Conference on Wireless Networks, Las Vegas, NV, July 12-15, 2010.

- Mobile Education: A Technology Startup Company, with J. Brown, UNCW/ASOC Meeting, UNCW, Wilmington, NC, March 26, 2010.

- Building Mobile Phone Applications, with J. Brown, Workshop Presentation at the 2010 Wilmington Information Technology eXchange and Conference, March 26, 2010.

- Mobile Device Security with a focus on Bluetooth Hacking, with P. Whisenhunt, Poster Presentation at the 2010 Wilmington Information Technology eXchange and Conference, March 26, 2010.

- Mobile Education's SMS Survey/Poll System, with J. Brown, D. Braden, B. Davis, T. Tran, and C. Velado, Poster Presentation at the 2010 Wilmington Information Technology eXchange and Conference, March 26, 2010.

- Building Mobile Phone Applications, ACM Distinguished Lecture, Keynote address at the Consortium for Computing Sciences in Colleges (CCSC) annual conference, Roanoke College, Salem, VA, November 13-14, 2009.

- UNCW Mobile Applications: Interactive Text Message and iPhone Development, with J. Brown, C. Alvarez, R. Valea, and P. Whisenhunt, UNCW Board of Trustees Meeting, Wilmington, NC, October 22, 2009.

- Mobile Education LLC, with J. Brown, UNCW Entrepreneurship Center Hi-Growth Startup Pitch Event, Wrightsville Beach, NC, April 29, 2009.

- Building Mobile Messaging Applications with SMS, UNCW Admissions Master Class, UNC Wilmington, Wilmington, NC, March 28, 2009.

- UNCW Text Message Applications, with J. Brown, J. Watkins, and Wade Grant, Poster Presentation at the 2009 Wilmington Area IT Professionals Technology Exchange and Fair, March 26, 2009.

- UNCW Text Message Applications, with J. Brown, L. Kraus, and T. Thompson, 2009 UNC Teaching and Learning with Technology Conference, March 13-20, 2009.

- Dub Hunt: Interactive Campus Scavenger Hunt, with J. Brown, A. Dorow, C. Logan, T. Skandier, and T. Thomas, 2009 Southern Regional Orientation Workshop, Oxford, MS, March 13-15, 2009.

- Dub Hunt: Interactive Campus Scavenger Hunt, with J. Brown, A. Dorow, and C. Logan, NC National Orientation Directors Association Conference, Greensboro, NC, February 12, 2009.

- Building Mobile Messaging Applications with SMS, ACM Distinguished Lecture, Duke University, Durham, NC, February 5, 2009.

- UNCW Text Message Applications, with J. Brown and D. Saunders-White, 2008 UNC CAUSE Conference, Greensboro, NC, December 17-18, 2008.

- On the Design and Implementation of a System Integrating Outlook Mobile Services with the Short Message Service, with S. Border and J. Brown, 2008 International Conference on Wireless Networks, Las Vegas, NV, July 14-17, 2008.

- Mobile Education: A Collaborative Effort to Leverage IT Investments at UNCW, with J. Brown, Poster Presentation at the UNCW Interact Technology Showcase, Wilmington, NC, April 2, 2008.

- Building Mobile Messaging Applications with SMS, ACM Distinguished Lecture, College of Charleston, Charleston, SC, March 18, 2008.

- Extending GridNexus to Support the Visual Assembly of Web Services, with E. Harris and J. Brown, International Joint Conferences on Computer, Information, and Systems Sciences, and Engineering, December 3-12, 2007.

- Interactive Services on Mobile Devices for Higher Education, with J. Brown, R. Hoon, and D. Saunders-White, 2007 EDUCAUSE Conference, Seattle, Washington, October 23-26, 2007.

- Building Mobile Messaging Applications with SMS, Invited talk at the University of Virginia, June 19, 2007.

- Interactive Services on Mobile Devices for Higher Education, with J. Brown, 2007 Southeast EDUCAUSE Conference, Atlanta, GA, June 10-13, 1007.

- Parallel Processing with GT4, with J. Brown, M. Freeze, and E. Harris, Poster Presentation at the International Conference on the Virtual Computing Initiative, Research Triangle Park, North Carolina, May 7-8, 2007.

- GridNexus: A Graphical User Interface for Grid Computing Applications, with E. Harris, Grid Computing Symposium and High-Performance Computing Workshop, NC A&T State University, Greensboro, NC, April 13, 2007.

- Investigating Innovative Applications of Blogs and Podcasts in University Environments, with L. Patterson, Poster Presentation at the UNCW Interact Technology Showcase, Wilmington, NC, March 29, 2007.

- Real-time Shuttle Bus Tracker, with A. Rawls and J. Brown, Poster Presentation at the UNCW Interact Technology Showcase, Wilmington, NC, March 29, 2007.

- GridNexus: A Graphical User Interface for Grid Computing Applications, with E. Harris, N. Martin, A. Stapleton, and J. Brown, Poster Presentation at the UNCW Interact Technology Showcase, Wilmington, NC, March 29, 2007.

- Short Message Service Applications, with B. Shipman, and J. Brown, Poster Presentation at the UNCW Interact Technology Showcase, Wilmington, NC, March 29, 2007.

- Application of Biometrics to Mobile Devices, with A. Curley, B. Shipman, J. Kim, and K. Ricanek, Poster Presentation at the UNCW Interact Technology Showcase, Wilmington, NC, March 29, 2007.

- An Update on UNCW's Grid Computing Research Project, with N. Martin and J. Brown, UNC-GA, Chapel Hill, NC, September 18, 2006.

- UNCW's Grid Computing Project, Presentation to NCCU's Computer Science and Information Systems Departments, Durham, NC, June 23-24, 2006.

- Virtual Learning Community Project, with D. Ward and G. Lugo, Poster Presentation at the UNCW Interact Technology Showcase, Wilmington, NC, March 29, 2006.

- GridNexus – A Graphical User Interface for Grid Computing, with N. Martin, C. Ferner, J. Brown, A. Martin, J. Martin, and L. Bartolotti, 57th Southeast/61st Southwest Regional Meeting of the American Chemical Society, Memphis, TN, November 1-4, 2005.

- Classroom Uses of Mobile Devices, PT3 Technology Institute, UNCW School of Education, April 23, 2005.

- On the Design and Implementation of a Location-Aware Campus-Based Computing Infrastructure, with E. Dunn, 2005 UNC Teaching and Learning with Technology Conference, Raleigh, NC, March 30, 2005.

- Technology in the Classroom: Wireless Networking and Handheld Computers in Lecture and Lab, with B. Heath, UNCW Adult Scholars Leadership Program, February 24, 2005.

- UNCW's Mobile Learning Environment, Multimedia Users Group for Teaching and Learning, North Carolina State University, January 20, 2005.

- GridNexus and JXPL: A Grid Services Workflow System, with J. Brown and C. Ferner, MCNC Grid Technology Workshop, December 14, 2004.

- Integrating Digital Libraries with Traditional Libraries: Collaborating for Sustainability, with D. Pfohl and D. Ward, Poster Presentation at the NSF NSDL Workshop, Chicago, IL, November 15-17, 2004.

- An Introduction to Emerging Web and Grid Services, ACM Distinguished Lecture, University of Pittsburgh, October 21, 2004.

- An Introduction to Emerging Web Technologies, ACM Distinguished Lecture, Allegheny College, October 20, 2004.

- Future Prospects for Mobile Learning, PT3 Summer Technology Institute, UNCW Executive Development Center, June 14, 2004.

- Technology in the Classroom: Wireless Networking and Handheld Computers in Lecture and Lab, UNCW Watson School of Education, Classroom Presentation, March 22, 2004.

- Technology in the Classroom: Wireless Networking and Handheld Computers in Lecture and Lab, with B. Heath, UNCW Adult Scholars Leadership Program, March 4, 2004.

- An Introduction to Emerging Web Technologies, ACM Distinguished Lecture, Indiana University, February 4, 2004.

- An Introduction to Emerging Web Technologies, ACM Distinguished Lecture, American College of Computer and Information Sciences, December 11, 2003.

- An Introduction to Wireless Networking and Mobile Computing, UNCW College Day, November 22, 2003.

- The Mobile Learning Environment Project, with R. Herman, G. Lugo, R. Reeves, and D. Ward, UNC Cause 2003 Conference, Wilmington, NC, November 12-14, 2003.

- UNC-OP and MCNC Grid Computing Forum, with J. Brown, C. Ferner, and M. Wood, Friday Center, Chapel Hill, NC, October 28-29, 2003.

- Power Expectations for a Leading-Edge Center for Computer Science, 2003 Electric Power Research Institute (EPRI) Power Quality Interest Group Meeting, Wrightsville Beach, NC, October 20-21, 2003.

- Integrating Digital Libraries with Traditional Libraries: A Model for Sustaining NSDL Collections, with S. Cody and D. Ward, Poster Presentation at the NSF NSDL Workshop, Washington, DC, October 12-14, 2003.

- Wireless Networking and Handheld Computers in Lecture and Lab, Onslow County Educator's Curriculum Conference, Jacksonville High School, Jacksonville, NC, July 29, 2003.

- Overview of Computer Science, Summer Ventures, UNC-Wilmington, June 28, 2003.

- Web-based Assessment Tools: Online Observational Profiles and Student Response System, PT3 Technology Institute, UNC-Wilmington School of Education, June 12, 2003.

- An Introduction to Emerging Web Technologies, ACM Distinguished Lecture, Duke University, Durham, NC, March 25, 2003.

- New Work Habits for the Information Age, UNCW ITSD Student Technology Assistant (STA) Training Program, UNC-Wilmington, March 18 and 19, 2003.

- Opportunities in a Wireless World - How the Rapid Growth of Wireless Technologies May Impact Your Business and Present New Business Opportunities, Opportunity 2003: Business Begins where the Ocean Ends, Coastal Entrepreneurial Council, Wrightsville Beach, NC, March 7, 2003.

- Technology in the Classroom: Wireless Networking and Handheld Computers in Lecture and Lab, with B. Heath, UNCW Adult Scholars Leadership Program, February 27, 2003.

- The iLumina Digital Library Project, with D. McArthur, UNCW Computer Science Department Seminar, February 26, 2003.

- A Look at the Creation and Maintenance of a Digital Library of Educational Resources, with D. Ward, UNCW Visit by Sheppard Air Force Base, January 13, 2003.

- Pocket PCs and Wireless Networks in Science and Mathematics Education, with D. Ward, UNCW Visit by Sheppard Air Force Base, January 13, 2003.

- Emerging Web Technologies, UNCW College Day, November 23, 2002.

- Computer Information Systems Building: Transitioning into the Digital Age, UNCW Board of Trustees, UNC-Wilmington, November 11, 2002.

- Metadata and Learning Objects: Lessons Learned from the iLumina Digital Library, MIT 540 Colloquium, School of Education, UNC-Wilmington, October 31, 2002.

- Technology in the Classroom: Wireless Networking and Handheld Computers in Lecture and Lab, PT3 Technology Institute, UNC-Wilmington, October 25, 2002.

- An Introduction to Emerging Web Technologies, ACM Distinguished Lecture, William and Mary, Williamsburg, VA, October 4, 2002.

- Project Numina: Innovative Integration of Media into Higher Education Curricula, with D. Ward and G. Lugo, NC State's 7th Annual Exposition of Educational and Instructional Technologies (EdTech 2002), September 26, 2002.

- Developing Rich Media Content and Wireless Instruction, with T. Rhyne, NC State's 7th Annual Exposition of Educational and Instructional Technologies (EdTech 2002), September 26, 2002.

- Technology in the Classroom: Wireless Networking and Handheld Computers in Lecture and Lab, PT3 Technology Institute, UNC-Wilmington, September 13, 2002.

- Course #48 - Dynamic Media on Demand: Exploring Wireless and Wired Streaming Technologies and Content, with T. Rhyne, L. Bishop, D. Holmes, and A. Turner, ACM SIGGRAPH 2002, San Antonio Conference Center, July 21-26, 2002.

- Technology in the Classroom: Wireless Networking and Handheld Computers in Lecture and Lab, PT3 Technology Institute, UNC-Wilmington, June 21, 2002.

- The Pocket PC in Higher Education with D. Ward and G. Lugo, UNCW PDA and Handheld Computing Workshop, April 16, 17, and 23, 2002.

- An Introduction to Emerging Web Technologies, ACM Distinguished Lecture, Miami University, Oxford, OH, April 10, 2002.

- Technology in the Classroom: Wireless Networking and Handheld Computers in Lecture and Lab, UNCW Adult Scholars Leadership Program, February 28, 2002.

- An Introduction to Emerging Web Technologies, ACM Distinguished Lecture, Middle Tennessee State University, Murfreesboro, TN, February 14, 2002.

- An Introduction to Emerging Web Technologies, ACM Distinguished Lecture, Austin Peay State University, Clarksville, TN, February 13, 2002.

- An Introduction to Emerging Web Technologies, ACM Distinguished Lecture, Western Kentucky University, Bowling Green, KY, February 12, 2002.

- An Introduction to Emerging Web Technologies, ACM Distinguished Lecture, University of Central Florida, Orlando, FL, October 3, 2001.

- Advanced Software Development at UNCW, Presentation at the ITSD General Staff Meeting, UNC-Wilmington, August 27, 2001.

- An Introduction to Emerging Web Technologies, Presentation at the ITSD Application Services Retreat, New Bern, NC, July 25, 2001.

- The Profession of IT and Computer Science, Presentation to Summer Ventures students, UNC-Wilmington, June 30, 2001.

- Emerging Technologies for Teaching and Learning, Keynote address at the "Classroom Without Walls" Instructional Technology conference at Minnesota State University - Moorhead, Moorhead, MN, May 16, 2001.

- Emerging Technologies for Teaching and Learning, Presentation at the Annual Conference of the North Carolina Association of Colleges and Employers (NCACE 2001), Wrightsville Beach, NC, May 3, 2001.

- Wireless Networks and Pocket PCs, Wilmington PC User's Club, April 17, 2001.

- Partnering Internationally, Benefiting Locally, 7th Annual Conference of the Coalition of Urban and Metropolitan Universities, March 25-26, 2001.

- The Distance Learning Design/Model (DLD/M) Project, North Carolina Adult Education Association (NCAEA) Conference, November 1-3, 2000.

- Web-Based Enterprise Computing, CIS Research Colloquium, Georgia State University, Atlanta, GA, October 20, 2000.

- The Distance Learning Design/Model (DLD/M) Project, Telelearning 2000, Atlantic City, NJ, October 14-17, 2000.

- Web Technologies, Wireless Networks, and Pocket Computers for Everyday Classroom Use, 4th UNC Workshop on the Use of Technology for Distance Education Pre-workshop Tutorial, North Carolina State University, Raleigh, NC, September 20, 2000.

- An Introduction to the Technologies of the Internet, ACM Distinguished Lecture, Frostburg State University, Frostburg, MD, April 15, 2000.

- The Virtual University: An Example, Panel presentation at the 6th UNC Forum on Distance Learning and Education, Wrightsville Beach, NC, March 9-10, 2000.

- An Introduction to the Technologies of the Internet, ACM Distinguished Lecture, Allegheny College, Meadville, PA, March 3, 2000.

- Agent-based Network Management Using Active Network Components, Panel presentation at the NSF Workshop on Network Quality, Arizona State University, Tempe, AZ, February 25-26, 2000.

- Computer Careers, Vocational Education Week at Trask Middle School, Wilmington, NC, February 17, 2000.

- The Y2K Problem, National Association of Credit Managers, Wilmington, NC, December 3, 1999.

- A Faculty Team Approach to Developing Online Courses, Presentation for the UNCW Global Virtual University, UNC-Wilmington, December 1, 1999.

- Y2K: Myths and Reality, UNCW Public Forum, UNC-Wilmington, November 30, 1999.

- Current and Future Prospects for Online Courses, ACM Distinguished Lecturer, International Symposium on Computer Science and Computer Engineering (EITEC99), Instituto Tecnologico de La Laguna at Torreon, Coahuila Mexico, November 13, 1999.

- An Introduction to the Technologies of the Internet, ACM Distinguished Lecturer, International Symposium on Computer Science and Computer Engineering (EITEC99), Instituto Tecnologico de La Laguna at Torreon, Coahuila Mexico, November 11, 1999.

- The Digital Communities Virtual University Experiment, Presentation at the Best Practices in Outreach and Public Service, State College, PA, October 10-12, 1999.

- Distance Learning Design/Model (DLD/M) Project, Presentation at the Third UNC Workshop on the Use of Technology for Distance Education, North Carolina State University, Raleigh, NC, September 22-23, 1999.

- The Y2K Problem, North Carolina Southeast Heating and Air Association, Wilmington, NC, August 17, 1999.

- Computer Challenges in the Year 2000, Coastal Kiwanis Club, Wilmington, NC, July 28, 1999.

- Distance Learning Design/Model (DLD/M) Project, Presentation at the 1999 North Carolina Distance Learning Alliance Conference, Guilford Technical Community College, July 14-16, 1999.

- Y2K Business Forum Sponsored by the Wilmington Chamber of Commerce, UNC-Wilmington, June 25, 1999.

- Web-Based Subcommittee Report, Presentation to the Computer Society Conference and Tutorials Board, Richmond, Virginia, June 9, 1999.

- Computer Challenges in the Year 2000, Wilmington Rotary Club, May 25, 1999

- New Work Habits for the Information Age, UNCW Corporate Communications Class Keynote Address, UNC-Wilmington, April 27, 1999.

- Computer Challenges in the Year 2000, ACM Distinguished Lecturer, Moorhead State University, Moorhead, MN, April 15, 1999.

- Computer Challenges in the Year 2000, Wilmington Cape Fear Rotary Club, March 19, 1999.

- Introduction to Online Communication, Spring 1999 Pathways Workshop for UNCW's Division for Public Service and Extended Education, March 6, 1999.

- Computer Challenges in the Year 2000, ACM Distinguished Lecturer, Wytheville Community College, Wytheville, VA, February 17, 1999.

- Computer Careers, Vocational Education Week at Trask Middle School, Wilmington, NC, February 8, 1999.

- Computer Challenges in the Year 2000, National Association of Retired Federal Employees, Wilmington, NC, February 3, 1999.

- Computer Challenges in the Year 2000, Wilmington PC Club, January 19, 1999.

- Web Programming, Presentation to Cape Fear Academy Computer Science students, Wilmington, NC, December 8, 1998.

- UNCW's Virtual University Component of the Digital Communities Project, Computer demonstration of UNCW's Online Courses at the Digital Communities International Forum, Tokyo, Japan, November 16-17-1998.

- International Distance Learning Programs at the University of North Carolina at Wilmington, Presentation at the Fall 1998 Board of Visitors Meeting, UNC-Wilmington, October 30, 1998.

- Entrepreneurial Creation of High-Quality Distributed Learning Courses at the University of North Carolina at Wilmington, Panel Presentation at the 38th Annual Conference of the Association of General and Liberal Studies, St. Louis, Missouri, October 15-17, 1998.

- Current Status and Future Prospects for Online Courses, North Carolina A&T State University, Greensboro, North Carolina, September 30, 1998.

- Introduction to Online Communication, Fall 1998 Pathways Workshop for UNCW's Division for Public Service and Extended Education, September 19, 1998.

- Developing Fifteen Online Courses in 140 Days! The Second Annual UNC Workshop on the Use of Technology for Distance Education, North Carolina State University, September 16-17, 1998.

- Computer Challenges in the Year 2000, UNCW Public Service and Extended Education Workshop, February 24, 1998.

- Developing an Online Internet-Based Course, 28th Annual North Carolina Accounting Education Colloquium, Blockade Runner Resort and Conference Center, Wrightsville Beach, NC, February 20-21, 1998.

- Computer Careers, Vocational Education Week at Trask Middle School, Wilmington, NC, February 11, 1998.

- Developing an Online Internet-Based Course, UNCW Mathematical Sciences Seminar, January 21, 1998.

- Developing an Online Web-based Course, Poster/Demo Presentation at the World Conference of the WWW, Internet, & Intranet (WebNet '97), Toronto, Canada, November 1-5, 1997.

- Developing an Online Internet-based Course, The First Annual UNC Workshop on the Use of Technology for Distance Education, North Carolina State University, September 24-25, 1997.

- The Rapid Change in Technology, NDSU/US WEST Multimedia Project, May 13, 1997.

- The MBone at UNCW, 1997 UNCW Technology Expo, April 16, 1997.

- Web-based Teacher Professional Development: Current Implementations and Future Prospects, Panel Presentation at the Society for Information Technology and Teacher Education (SITE), Orlando, Florida, April 1-5, 1997.

- Demo of the MBone, UNCW Multimedia User's Group (MMUG), March 4, 1997.

- UNCW Campus Networking, UNCW Mathematical Sciences Seminar, November 13, 1996.

- ATM Networks: The Next Generation of Computer Networking, Cape Fear Community College, Wilmington, NC, November 7, 1996.

- Tutorial on ATM Networking, First Annual NDSU Workshop on ATM Networking, North Dakota State University, August 7-9, 1996.

- Analysis of Variable Bit Rate Traffic Using MPEG-1 Over ATM Networks, The NDSU Workshop on ATM Networking, August 7-9, 1996.

- Some Aspects of Distributed Database Management in High-Speed Network Environments, The 11th International Conference on Systems Engineering (ICSE '96), Las Vegas, Nevada, July 9-11, 1996.

- A Multimedia System for Asynchronous Collaboration Using the Multicast Backbone and the World Wide Web, The First Annual Conference on Emerging Technologies and Applications in Communications, Portland, Oregon, May 7-10, 1996.

- Upper Midwest Aerospace Consortium (UMAC) Networking Needs, University of North Dakota, Grand Forks, ND, April 18, 1996.

- Emerging Technologies for Distance Education, The 29th Annual Small College Computing Symposium (SCCS '96), St. Cloud University, St. Cloud, MN, April 18-20, 1996.

- Internet Connectivity Workshop, Runestone Telephone Co., Hoffman, MN, March 28, 1996.

- Internet Connectivity Workshop, Garden Valley Telephone Co., Erskine, MN, March 26, 1996.

- ATM Switching Architectures, NDSU Systems Seminar, February 14, 1996.

- ISDN and Desktop Video Conferencing, IEEE Student Group - NDSU, February 12, 1996.

- Life, the Universe, and ATM Switching, NDSU Systems Seminar, February 7, 1996.

- Demo of Desktop Video Conferencing Products, State Board of Higher Education, NDSU, January 25, 1996.

- Demo of Desktop Video Conferencing Products, NDSU Systems Seminar, January 17, 1996.

- Desktop Video Conferencing on a WAN Connection: A Demonstration of an Emerging Technology, Workshop on School Networking II - From Desktops to LANs to World Wide Web, Center for Innovation in Instruction, Valley City State University, October 30, 1995.

- Emerging Network Technologies for Distance Education, University of Minnesota Computer Science Department Seminar Series, October 2, 1995.

- US WEST Grant: Multimedia Modules for Teachers, Presentation to the SEND Executive Committee, Valley City, ND, September 27, 1995.

- Hot Topics in High-Speed Networking, NDSU Systems Seminar, September 27, 1995.

- The ATM Physical Layer, NDSU ATM Seminar, September 19, 1995.

- Multimedia Fair Use Guidelines - Panel Discussion, NDSU, September 21, 1995.

- Using the MBone at NDSU, Information Technology Services Seminar - NDSU, Sept. 21, 1995.

- An Overview of ATM, NDSU ATM Seminar, September 19, 1995.

- Standards for Desktop Video Conferencing, NDSU Systems Seminar, September 13, 1995.

- Integrating Interactive Graphics Techniques with Future Technologies, Panel Presentation at the 22nd International Conference on Computer Graphics and Interactive Techniques (SIGGRAPH '95), Los Angeles, California, August 6-11, 1995.

- Educational Telecommunications in North Dakota: Present and Future, North Dakota Association of Telephone Cooperatives Summer Conference, Grand Forks, North Dakota, July 13, 1995.

- An Introduction to Computer Networks - A Panel Discussion, 1995 Instructional Technology Conference (ITECH '95), North Dakota State University, April 21-22, 1995.

- Emerging Issues on the WWW, NDSU/MSU Collaborative Multimedia Seminar, March 29, 1995.

- ATM Concepts, Architecture, and Protocols, NDSU Systems Seminar, January 18, 1995.

- Rate Control Mechanisms for Packet Video on the Internet, NDSU/MSU Collaborative Multimedia Seminar, December 7, 1994.

- Wavelength and Time Division Multiplexed Networks, NDSU Systems Seminar, Nov. 23, 1994.

- An Introduction to Computer Networks, NDSU ACM Chapter Meeting, October 18, 1994.

- MBone: The Multicast Backbone, NDSU Systems Seminar, October 12, 1994.

- Optical Computing, NDSU Networks and Database Seminar, October 10, 1994.

- Research Issues in Multimedia Systems, NDSU/MSU Collaborative Multimedia Seminar, September 28, 1994.

- Research Issues in Multimedia Database Management Systems, The Second Annual Mid-Continent Information and Database Systems Conference, North Dakota State University, Fargo, ND, May 22-24, 1994.

- A Network Architecture for Distributed High Performance Heterogeneous Computing, The Eighth International Parallel Processing Symposium Workshop on Heterogenous Computing (IPPS '94), Cancun, Mexico, April 26-29, 1994.

- International Digital Compression Standards, UNCW Mathematical Sciences Seminar, January 19, 1994.

- High Performance Computing with HIPPI, Computer Science Seminar, University of North Dakota, December 13, 1993.

- Network Supercomputing, MCNC Center for Communications Research, Research Triangle Park, December 6, 1993.

- An Introduction to the Internet and its Resources, UNCW Math. Sci. Seminar, Nov. 29, 1993.

- Multimedia Computing, UNCW Mathematical Sciences Seminar, November 22, 1993.

- Emerging High-Speed Networks, UNCW Mathematical Sciences Seminar, November 1, 1993.

- Communication Networks: Present and Future, First Annual Mid-Continent Information Systems Conference (MISC-93), North Dakota State University, Fargo, ND, May 3-4, 1993.

- BISDN and the ATM Standard, NDSU Systems Seminar, April 28, 1993.

- Instructional Multimedia: Bringing Students and Teachers Together in a Video, Audio, and Computing Environment, 1993 Instructional Computing Conference (ICC '93), North Dakota State University, April 23-24, 1993.

- The CM-2 Data Transposition Problem, The Seventh International Parallel Processing Symposium (IPPS '93), Newport Beach, CA, April 13-16, 1993.

- Interactive Digital Video, NDSU Systems Seminar, February 17, 1993.

- Research Topics in Multimedia Systems, NDSU Computer Systems Seminar, Jan. 27, 1993.

- Network Supercomputing: Experiments with a CRAY-2 to CM-2 HIPPI Connection, The Sixth International Parallel Processing Symposium (IPPS '92), Beverly Hills, CA, March 23-26, 1992.

- Topological Design of Optically Switched WDM Networks, 16th Conference on Local Computer Networks, Minneapolis, MN, October 14-17, 1991.

Grants, Contracts, and Other Funding:

- Maritime Cyber Security: Standards Advancement, Research and Workforce Development, with Ulku Clark (PI), Award for $625,000; Grant Period October 1, 2024 – September 30, 2026.

- Continuing the work of the National Treatment Court Resource Center, with Kristen DeVall (PI), Christina Lanier (Co-PI), Sally MacKain (Co-PI), and Jeanne Persuit (Co-PI), US Department of Justice; Continuation Award for $200,000; Grant Period: October 1, 2025 – September 30, 2026.

- Adult Treatment Court Planning, Training, Technical Assistance, and Resources Center Initiative, with Kristen DeVall (PI), Christina Lanier (Co-PI), Sally MacKain (Co-PI), and Jeanne Persuit (Co-PI), US Department of Justice; Continuation Award for $1,750,000; Grant Period: November 1, 2023 – September 30, 2025.

- Developing a Drug Court Resource Center, with Kristen DeVall (PI), Christina Lanier (Co-PI), Sally MacKain (Co-PI), and Jeanne Persuit (Co-PI), US Department of Justice; Continuation Award for $1,600,000; Grant Period: November 1, 2021 – September 30, 2023.

- UNCW-CFCC Collaborative Cybersecurity Apprenticeship Program (CCAP), with Ulku Clark (PI), Geoff Stoker (Co-PI), Laurie Patterson (Co-PI), William Wetherill (Co-PI), and Greg Vandergriff (Co-PI), Department of Defense Cyber Scholarship Program – Capacity Building Grant; Award for $196,782; Grant Period: September 15, 2020 – December 14, 2021.

- Developing a Drug Court Resource Center, with Kristen DeVall (PI), Christina Lanier (Co-PI), Sally MacKain (Co-PI), and Jeanne Persuit (Co-PI), US Department of Justice; Award for $1,600,000; Grant Period: November 1, 2019 – September 30, 2021.

- The iPlant Collaborative: Cyberinfrastructure for the Life Sciences, with Ann Stapleton (PI), National Science Foundation (part of an award for $50 million thru the University of Arizona and the University of Texas at Austin); Award for $627,870; September 1, 2013 – August 30, 2016.

- Center for Academic Studies in Identity Sciences, with Karl Ricanek (PI), Gayathri Mahalingam, and Amrutha Sethuram, North Carolina A&T State University (part of a larger award from the federal government intelligence community); Award for $260,828; December 1, 2012 – December 31, 2013.

- Grid Blade Center/NetApp, Equipment Grant from MCNC; Award for $12,200; November 2007.

- Co-principal investigator, A Proposal for AVL Enhancements for the Cape Fear Public Transit Authority, with A. Rawls and C. Guinn, Wave Transit Authority Funding: $5000; Contract Period: July 1, 2007 – March 31, 2008.

- Co-principal investigator, A Proposal for Continuation of UNCW's Bus Tracking Initiative for the Business Affairs Division, with A. Rawls, UNCW Business Affairs Funding: $2,400; Contract Period: July 1, 2007 – December 31, 2007.

- Co-principal investigator, A Proposal for a Bus Tracking Initiative for UNCW's Business Affairs Division, with J. Brown, A. Rawls, and B. Shipman, UNCW Business Affairs Funding: $2,400; Contract Period: January 1, 2007 – May 31, 2007.

- Co-principal investigator, UNCW Grid Computing Project, with J. Brown, N. Martin, and A. Stapleton, UNCW HPC Funds: $22,000; Grant Period: January 1, 2007 - June 30, 2007.

- Co-principal investigator, Investigating Innovative Applications of Blogs and Podcasts in University Environments, with L. Patterson, UNCW Information Technology Award, Award for $4,485; Grant Period: July 1, 2006 – April 30, 2007.

- Co-principal investigator, The Application of Blogs, RSS Feeds, and Podcasts to Online Instruction and Curriculum Development, with L. Patterson, UNCW Center for Teaching Excellence Summer Pedagogy Development Award, Award for $3,000; Grant period: June 2006.

- Co-principal investigator, Increasing and Retaining STEM Majors through Virtual Learning Communities, with C. Ward, G. Lugo, R. Herman, J. Reeves, and D. Cohen, NSF CCLI-EMD Program; Award for $124,485; Grant period: May 1, 2005 - April 30, 2007.

- Support for a New Graduate Program in Computer Science and Information Systems, with L. Clark and C. Canel, Corning Inc., Award for $10,000; April 2005.

- Proposal to Implement a Professional Master's Degree Program in Computer Science and Information Systems, with A. Gowan and B. Roer, Council of Graduate Schools/Sloan Foundation, Award for $25,000; Grant Period: April 1, 2005 – March 30, 2007.

- Principal Investigator/Project Director, Fostering Undergraduate Research Partnerships through a Graphical User Environment for the North Carolina Computing Grid, with B. Tyndall, B. Miller, L. Bartolotii, D. Berman, R. Boston, J. Brown, C. Ferner, T. Hudson, T. Janicki, N. Martin, M. McClelland, J. Porter, A. Stapleton, and A. Wilkinson, UNC Office of the President, Award for $557,634; Grant Period: June 1, 2004 – June 30, 2007.

- Co-principal investigator, The UNCW Grid Computing Project, with R. Tyndall, B. Miller, S. Cowdrey, J. Brown, N. Martin, A. Stapleton, and C. Ferner, UNC Office of the President: $82,723; UNCW HPC Funds: $65,000; In-kind Support: $59,097; Project total: $206,820; Grant Period: March 17, 2004 - June 30, 2004.

- Proposal to Plan the Development of a Professional Master's Degree Program in Computer Science and Information Systems, with several CSIS faculty, Council of Graduate Schools/Sloan Foundation Feasibility Planning Grant, Award for $4,500; Grant Period: January 1, 2004 - December 31, 2004.

- Co-principal investigator, Integrating Digital Libraries and Traditional Libraries: A Model for Sustaining NSDL Collections, C. Ward, G. Lugo, R. Herman, J. Reeves, R. Dillaman, S. Cody, D. Pfohl, A. Hanerfeld, B. Heath, D. McArthur, NSF Digital Libraries Initiative - Phase 4; Award for $425,093; Grant Period: September 1, 2003 - August 31, 2005.

- Co-principal investigator, The UNCW Grid Computing Project, with J. Brown and C. Ferner, UNCW Information Technology Award, Award for $23,760; Grant Period: March 17, 2003 - October 31, 2003.

- Co-principal investigator, Teaching Introduction to Computing and Computer Applications in a Modular Format, with L. Patterson, UNCW CAS Summer Curriculum Initiative, Award for $3,000; Grant Period: June 2002.

- Co-principal investigator, Integrating Interactive Media in the Chemistry Laboratory with Pocket PC's and Wireless Networking, with D. Ward, J. Reeves, G. Lugo, and R. Herman, UNCW Information Technology Innovation Award, Award for $14,733; Grant Period: January 16, 2002 – June 30, 2002.

- Co-principal investigator, A Collaborative Proposal for E-Learning in Computer Science and Engineering, with J. O'Neal, C. Miller, T. Miller, and M. Yoakan (NCSU), C. Ferner and J. Brown (UNCW), K. Williams and D. Yuan (NCA&T), M. Littlejohn and D. Brock (UNCA), UNC Office of the President's E-Learning Initiative, Award for $60,000; Grant Period: May 15, 2001 - June 30, 2001.

- Co-principal investigator, Project Numina: Innovative Integration of Media into Science and Mathematics Curricula, with Charles R. Ward, David White, Jimmy Reeves, Gabriel Lugo, and Russ Herman, Funded by UNCW, Pearson Education, and Hypercube; Award for $156,257; Grant period: August 15, 2000 – December 31, 2001.

- Co-investigator, A Digital Library of Reusable Science and Math Resources for Undergraduate Education, with W. Graves and D. McArthur - Collegis Research Institute, C. Ward, G. Lugo, J. Reeves, R. Dillaman, and R. Herman - University of North Carolina at Wilmington, D. Knox - College of New Jersey, E. Fox – Virginia Tech, S. Grissom – Grand Valley State University, and G.S. Owen - Georgia State University; NSF Digital Libraries Initiative - Phase 2; Award for $1,143,282; Grant period: May 2000 - April 2002.

- A Color Printer for Student Multimedia Projects, Equipment Grant from "Friends of UNCW", Award for $790; May 2000.

- A Digital Camera for Student Web Projects, Equipment Grant from "Friends of UNCW", Award for $650; April 1999.

- Instructional Technologist, Distance Learning Design/Model Project for the North Carolina Community College System, Contract funded by the NCCCS; Contract amount: $8,108; Contract period: December 1998 - May 1999.

- Web Course Development Faculty Associate, UNCW Chancellor's Steering Committee on Information Technologies, Contract for guiding the day-to-day work of the Web Course Development Team; Contract amount: $3,750; Contract period: May 20, 1998 - August 5, 1998.

- Video Capture Card for Student Web Projects, with G. Lugo, Equipment Grant from "Friends of UNCW", Award for $850; April 1998.

- Principal Investigator, Improving Multiple Section Course Offerings Using the World Wide Web, UNCW Center for Teaching Excellence Summer Teaching Initiative, Award for $2,500; Grant Period: June 1998.

- Co-investigator, A Faculty Team Approach to Developing On-Line Courses, with C. Ward, G. Lugo, A. Baptista, D. Cohen, R. Dixon, R. Herman, K. Newlin, J. Reeves, P. Shotsberger, K. Smith, and J. Wilson, UNC-GA Faculty and Course Development in Instructional Technology Initiative, UNC-GA Award - $45,711; UNCW Match - $37,450; Project total: $83,161; Grant Period: April 15, 1997 - July 31, 1997.

- Flatbed Scanner for Student Web-based Projects, Equipment Grant from "The Friends of UNCW", Award for $500; April 1997.

- Principal Investigator, Creating Collaborative Environments on the Internet, UNCW Summer Research Initiative, Award for $3,000; Grant Period: June 1997.

- Co-principal investigator, Remotely Sensing Impacts of Cropping Systems on Water Quality, with R. Knighton, W. Perrizo, S. Panigrahi, and D. Franzen, USDA-CSREES, National Research Initiative Competitive Grants, Award for $194,441; Grant Period: August 1996 - December 1998.

- Co-Investigator, Development of WWW Instructional Support for NDSU Faculty, with C. Balachandran, T. Barnhardt, R. Collins, F. Dooley, P. Juell, N. Lilleberg, P. McClean, J. Ross, B. Saini-Edukat, and V.

Tareski, NDSU Planning, Priorities and Resources Committee, Award for $42,400; Grant Period: July 1, 1996 - June 30, 1997.

- Co-Investigator, A Workshop to Develop Technology-Based Instruction Modules, with J. Gerst, N. Lilleberg, J. Ross, S. Sprafka, and R. Stammen, NDSU Planning, Priorities and Resources Committee, Award for $19,000; Grant Period: July 1, 1996 - June 30, 1997.

- Roger Maris Cancer Center/MeritCare Computer Research Fellow, with B. Gammill, A one-year graduate student fellowship for $10,000; Fellowship Period: January 1, 1996 - December 31, 1996.

- Co-principal investigator, A Public Access Resource Center (PARC) Empowering the General Public to use EOSDIS, with W. Perrizo, National Aeronautics and Space Administration, Part of the Upper Midwest Aerospace Consortium's (UMAC) Project Definition Phase, Award for $310,257; Grant Period: September 1, 1995 - July 31, 1996.

- Project Director/Principal Investigator, A Co-laboratory for ATM Network Research and Development, with W. Perrizo, P. Juell, V. Soloviev, D. Ewert, V. Phaniraj, M. Ali, and W. White, National Science Foundation Experimental Systemic Initiative Program, NSF Request $470,833; US WEST match $80,337; EROS Data Center match $67,500; North Dakota EPSCoR match $104,936; NDSU ITS match $73,979; NDSU College of S&M match $7,866; NDSU Research Admin match $7,866; NDSU/UND Indirect match $289,204; Project total: $1,102,521; Grant Period: October 1, 1995 - September 30, 1998.

- Co-principal investigator, World Wide Web Server for Faculty Development and Instructional Uses, with H. Ludwig, T. Barnhart, E. Borkowski, R. Collins, R. Harrold, P. Juell, A. Keogh, and V. Tareski, NDSU Planning, Priorities and Resources Committee, Award for $35,000; Grant Period: July 1, 1995 - June 30, 1996.

- Co-principal investigator, Collaboratively Created Multimedia Modules for Teachers, US West Foundation, with R. Stammen, Award for $287,000; Grant Period: July 1, 1995 - June 30, 1997.

- Co-principal investigator, Collaborative Multimedia Software Environments, with P. Juell, North Dakota EPSCoR Equipment Grant, Award for $1500; Grant Period: February 1, 1995 - August 31, 1995.

- Co-principal investigator, Independent Architecture Study for the Earth Observing System Data and Information System Core System, with G. Seielstad, W. Perrizo, and S. Reichenbach, Hughes Information Technology Company, Award for $346,590; Grant Period: March 3, 1994 - August 31, 1994.

Honors and Awards:

- Named as a 2025 Distinguished Contributor to the IEEE Computer Society. The selection is based primarily on research contributions, including highly cited research papers, professional presentations and talks, as well as service to the research community.
- Recipient of the 2023 Richard E. Merwin Award for Distinguished Service, the IEEE Computer Society's highest level volunteer service award, for outstanding service to the profession at large, including significant service to the Computer Society or its predecessor organizations.
- Recognized by UNCW Office of Sponsored Programs for external grant funding more than $5 million dollars (“Million Dollar Club”), September 2021.
- Council for Advancement and Support of Education Southeast District III Grand Award Winner in the Educational Fundraising Projects Category for the “Get to Know PHIL” Student Campaign, February 2012.
- Center for Digital Education and Converge Online Digital Education Achievement Award for Innovative Mobile Applications, September 7, 2010.
- First runner up in the 2008 AT&T Big Mobile Campus Challenge for Innovative Mobile Applications.
- Selected as the 2001-2002 Outstanding ACM Distinguished Lecturer, June 2002.
- Recognized by UNCW for outstanding contribution as a Faculty Intern Supervisor, May 2000.
- Honored for Outstanding Faculty Contribution to UNCW, May 2, 2000.
- Recognized by UNCW Office of Sponsored Programs for external grant funding in excess of $1 million dollars (“Million Dollar Club”), September 2003.

- Recognized as a faculty member who made significant contribution to the teaching environment at UNCW, May 5, 1999.
- Named by one or more graduating seniors as the single person at UNCW whose impact on them was most significant, every year since 1996.
- Honored for Outstanding Faculty Contribution to UNCW, April 7, 1999.
- IEEE Senior Member, Institute for Electronics and Electrical Engineering, 1998-present.
- ACM Distinguished Lecturer, Association for Computing Machinery, 1998-present.
- Service to the Computing Profession, Computer Society, June 5, 1998.
- Earned inclusion in the First Edition of Marquis' Who's Who in Media and Communications, 1998.
- Service to the Computing Profession, Computer Society, May 29, 1997.
- Honorary Member, Upsilon Pi Epsilon, University of North Carolina at Wilmington, May 1, 1997.
- Certificate of Completion of Instruction in Systematic Curriculum and Instructional Development, Center on Education and Training for Employment, College of Education, Ohio State University, August 4, 1995.
- Doctoral Dissertation Award, Computer Science Department, University of Minnesota, May 1992.
- Outstanding Teaching Assistant, Computer Science Department, University of Minnesota, June 1991.
- U.S.A. Academic All-American, North Dakota State University, 1986.

Professional Activities:

- Editor-in-Chief, Computer, 2011-2014.
- Guest Editor, Computer, Special Issue on Technology Commercialization, August 2014.
- Editorial Advisory Board, Computer, 1995-present.
- Department Editor, Computer, Spotlight on Transactions, 2018-present.
- Area Chair, ACM International Conference on Multimedia, 2022.
- Area Chair, ACM International Conference on Multimedia, 2021.
- Department Editor, Computer, From the Archives: Computer's Legacy, April 2017 – December 2017.
- Associate Editor, Computing Now, 2009-2012.
- Department Editor, Computer, Internet Watch, 1995-2001.
- Distinguished Lecturer, Association for Computing Machinery, 1998-2014.
- Editorial Advisory Board, Communications of the ACM, 1996-2008.
- Guest Editor, Computing Now, Theme Issue on Challenges and Opportunities in Mobile Web and App Development, November 2011.
- Guest Editor, Computing Now, Theme Issue on Entrepreneurship and Innovation, April 2011.
- Guest Editor, Computing Now, Theme Issue on Biometrics, February 2010.
- Guest Editor, Computer, Special Issue on Biometrics, February 2010.
- Guest Editor, Computing Now, Theme Issue on Professional Ethics, July 2009.
- Computer Society's Conference and Tutorials Board, 1998-2004.
- Computer Society's Electronic Products and Services Board, 2003-2005.
- Editorial Board for the International Journal of Network Management (IJNM), 2004 – 2011.
- Editorial Board for the International Journal of Computer Science & Information Engineering, 2008-2010.
- Member of the program committee for the 35th IEEE International Computer Software and Applications Conference (COMPSAC 2011) and co-chair of the Mobile and Pervasive Computing track, Munich, Germany, July 18-22, 2011.
- Member of the IEEE Local Computer Networks (LCN) Program Committee, 2005 - 2010.
- Member of the 5th International Workshop on Mobile Commerce and Services Program Committee, Qingdao, China, June 4-6, 2009.
- Member of the First IEEE International Workshop on Engineering Mobile-Based Software and Applications Program Committee, Beijing, July 23-27, 2007.
- Member of the IEEE 25th International Conference on Distributed Computing Systems Program Committee (Multimedia Systems Track), Columbus, Ohio, June 6-9, 2005.
- Member of the IEEE International Workshop on Wireless Commerce and Services Program Committee, Munich, Germany, July 19, 2005.
- Panel Reviewer, NSF CCLI and NSDL Programs, 2005, 2006, 2007, 2009.
- Member of the IEEE International Workshop on Wireless Commerce and Services Program Committee, San Francisco, CA, June 26, 2006.
- Associate Technical Editor, IEEE Communications, 1995-2001.

- Computer Engineering Technology Advisory Board, Cape Fear Community College, Two Terms: 1996-2000 and 2001-2005.
- Advisory Committee of the ACM Distinguished Lectureship Program, 2000-2005.
- Guest Editor, Computer, Special Issue on E-commerce, October 2000.
- Guest Editor, Decision Support Systems Journal, Special Issue on E-commerce, July 2001.
- Guest Editor, Journal of Mobile Networks & Applications, Special Issue on Mobile Commerce, June 2002.
- Workshop Facilitator, NSF/NSDL Workshop: Synergies between the NSDL and Educational Publishers, Columbia University, New York, NY, October 8, 2002.
- Networking Panelist, Workshop on Networks and Quality, Sponsored by Arizona State University, the National Science Foundation, and Motorola University, Temple, AZ, February 25-26, 2000.
- Joint Task Force on "Year 2001 Model Curricula for Computing: CC-2001" organized by Computer Society and ACM (Chair of "Net-Centric Computing" focus group), 1999-2001.
- Workshop Facilitator, Shaping the Future: New Expectations for Undergraduate Education in Science, Mathematics, Engineering, and Technology, sponsored by the National Science Foundation, North Carolina State University, Wake Technical Community College, and the North Carolina Community College System, Raleigh, North Carolina, October 23-24, 1998.
- Workshop Chair, NDSU Workshop on ATM Networking, Sponsored by the National Science Foundation, North Dakota State University, August 7-9, 1996.
- Guest Editor, Communications of the ACM, Special Issue on ATM Networks, February 1995.
- Member of the Computer Society Technical Committees on Computer Communications, Distributed Processing and Multimedia Computing, 1993-2005.
- Member of the IEEE Computer Society, 1988-present.
- Member of the Association for Computing Machinery, 1986-present.
- Member of the 20th International Conference on Distributed Computing Systems Program Committee, Sponsored by the IEEE, Taipei, Taiwan, Republic of China, April 10-13, 2000.
- Member of the 11th International Conference on Computer Applications in Industry and Engineering Program Committee, Sponsored by the ISCA, 1998.
- Member of the 11th Annual Symposium on Applied Computing, Special Track on Scientific Computing Program Committee, Sponsored by the ACM, 1995-96.
- Member of the Third IEEE Workshop on the Architecture and Implementation of High-Performance Communication Subsystems (HPCS'95) Program Committee, Sponsored by the IEEE, 1995.
- Member of the Instructional Technology Conference (ITECH) Steering Committee, North Dakota State University, 1994.
- Member of the Local Computer Networks (LCN) Conference Program Committee, Minneapolis, Minnesota, 1994, 1995, 1996, 1997.
- Satellite Site Coordinator for the 1994-95 and 1995-96 ACM North Central Regional Programming Contests hosted by North Dakota State University.

Recent Committee Service:

1. University Committees:

- Member of numerous university search committees, including:
  a. Director of the Office of Innovation and Commercialization (chair), 2020.
  b. Associate Dean for Academic Affairs for the College of Health and Human Services, 2018.
  c. Member of Vice-Chancellor for Business Affairs Search Committee, 2017-2018.
  d. Information Technology Systems Chief Information Officer Position (chair), 2015.
- F&A Policy Review Committee (chair), 2017.
- Graduate Coordinator, MS CSIS Program, 2006-2011 & 2020-2022.
- UNCW Innovation and Technology Development Leadership Committee, 2009-2013.
- UNCW Ad Hoc Economic Development Committee, 2009-2018.
- Graduate Council, 2007-2010.
- ITSD Committee for Academic Research Technologies, 2007-2010.
- UNCW Faculty Hearings Panel, 2008-2009.
- UNCW Committee to Review Proposed Entrepreneurship Center, 2009.
- UNCW Faculty Reporting Software Committee, 2007.
- UNCW Master Plan Advisory Committee, 2004-2005.
- ITSD Information Technology Coordinating Council, 2003-2005

- UNCW Intellectual Property Committee, 2003-2007.
- College of Arts and Sciences Dean's Search Committee, 2004-2005.
- UNCW Director of Technology Search Committee, 2005.
- ITSD Committee on Baseline Standards for Computers (co-chair), 2002-2005.
- ITSD Technology Innovation Grant Awards Committee, 2003-2007.
- Global Virtual University Steering and Advisory Committees (chair), 1997-1999.
- UNCW Faculty Senate Information Technology Committee (chair), 2002-2004.
- UNCW ISOM/CSC Classroom Building Academic Programming Committee, 2004.
- Provost Advisory Council, 2006-2007.
- Ad hoc Committee on Faculty Reporting Software, 2007.

2. Local/Regional Committees:

- Member of the United Way of the Cape Fear Area Planning Committee, 2017.
- Cape Fear Community College Computer Engineering Technology Advisory Committee, 2000-2006.

3. National Committees:

- Editorial Advisory Board for Computer Magazine, 1995-present.
- Editorial Advisory Board for Computing Now, 2009-2012.
- Editorial Advisory Board for Communications of the ACM, 1996-2012.
- Advisory Committee of the ACM Distinguished Lectureship Program, 2000-2005 (Chair 2003-04).
- Computer Society Conference and Tutorials Board, 1998-2004.
- Computer Society Web-Redesign Committee, 2002-2004.
- Computer Society eLearning Committee, 2002-2004.
- Computer Society Digital Library Committee, 2002-2007.
- Computer Society Electronic Products and Services Board, 2004-2005.