JOSEPH B. EVANS

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EDUCATION

PRINCETON UNIVERSITY Princeton, New Jersey
1983 – 1989
Ph.D., May 1989; M.A., January 1986; M.S.E., October 1984
Major: Signal processing and communications Minors: Systems theory and statistics
Dissertation: *Performance and VLSI Implementation of Novel Adaptive Filtering Algorithms*
Advisor: Professor Bede Liu

LAFAYETTE COLLEGE Easton, Pennsylvania
1979 – 1983
B.S.E.E., Summa Cum Laude with Honors in EE, May 1983

RESEARCH AND WORK EXPERIENCE

GENERAL DYNAMICS C4S Arlington, Virginia
ASCEND INTELLIGENCE, LLC Arlington, Virginia
TACTICAL BLUE LABORATORIES, LLC Olathe, Kansas
August 2006 – November 2014, Consultant (General Dynamics C4S) and Chief Scientist / Partner (Ascend Intel)

- Established technical team to develop TIGR (Tactical Ground Reporting System) for DARPA and US Army. TIGR supports media-rich information sharing over tactical networks.
- Software deployed to all US Army brigades in Iraq and Afghanistan as well as CONUS training sites.
- Personally performed software development and network studies on TIGR during multiple deployments to Iraq and Afghanistan theatres of operations.
- Company (Ascend Intelligence) acquired by General Dynamics C4S in 2010.

UNIVERSITY OF KANSAS Lawrence, Kansas
August 2005 – present, Deane E. Ackers Distinguished Professor August 2008 – May 2010, Director, ITTC
August 1999 – 2004, Charles E. Spahr Professor August 2005 – 2008, Director of Research IT
August 1994 – 1999, Associate Professor August 1996 – 2004, Director, NDSL
August 1989 – 1994, Assistant Professor October 1999 – August 2000, Acting Director, ITTC

- Director, Information & Telecommunications Technology Center (ITTC), 2008 to 2010. ITTC is one of the largest research centers at the University of Kansas, with approximately 170 faculty, staff, and students.
- Director of Research Information Technology, 2005 to 2008. Responsible for the University's research cyberinfrastructure strategy.
- Acting Director, Information & Telecommunications Technology Center (ITTC), October 1999 to August 2000, at that time the second largest research center at the University of Kansas, with annual expenditures of approximately $7 million.
- Director, Networking & Distributed Systems Laboratory, ITTC, 1996 to 2004.
- Wide-ranging research program in the areas of wireless networks, ubiquitous computing and networking systems, high-speed communications networks (in particular switching hardware), software (including protocols and signaling) design, and performance evaluation.
- Participant in founding of MAGIC gigabit testbed, LAN/WAN gateway and congestion control research in this testbed. Participant in founding of the ACTS ATM Internetwork, research on TCP and ATM congestion control schemes in this testbed. Participant in founding of the SPARTAN testbed, research on multimedia applications over this testbed. Participant in the CAIRN and DARTnet networks sponsored by DARPA.
- Performed sponsored research in signal processing, including adaptive filtering, digital speech processing, and VLSI design and algorithms for signal processing.
- Collaborative research with the School of Education on the use of the Internet to distribute K-12 educational resources to schools. Developed software in use by over 50 schools.
- Over $11 million in total funding as Principal or Co-Principal Investigator and over $10 million in total funding as Co-Investigator.
- Seventy M.S. degree students graduated.
- One Ph.D. degree candidates currently supervised, six students graduated.
- Teaching reviews: graduate - 4.69/5.0, undergraduate - 4.33/5.0, overall - 4.51/5.0

- Teaching in computer engineering area: EECS 888 - Internet Routing Architectures (new course), EECS 800 - Advanced Internetworking (new course), EECS 745 / EECS 845 - High Performance Integrated Networks (new course), EECS 846 - High Performance Digital Signal Processing (new course), EECS 843 - Fault Tolerant Systems (new course), EECS 663 - Introduction to Communications Networks, EECS 546 / ECE 646 - Integrated Circuit Design, EECS 541 & 542 - Computer Systems Design (new CoE capstone course), ECE 312 - Electronics I, ECE 148 - Algorithmic Problem Solving, ECE 140 - Introduction to Digital Logic
- Established networking teaching laboratory facility, and online curriculum and laboratory program.
- Developed VLSI design program, including arranging for MOSIS IC fabrication.
- Host to visiting graduate students from Hogeschool Enschede, Netherlands, 1993-1994, 1996.
- Host to visiting students, NSF Research Experience for Undergraduates program, 1993-1995.

NATIONAL SCIENCE FOUNDATION — Arlington, Virginia
August 2003 – December 2005, Program Director

- Program director in networking area of Computer and Network Systems Division, Directorate of Computer & Information Science & Engineering (CISE/CNS).
- Principal in restructuring of NSF networking efforts and formulation of $40 million Research in Networking Technology and Systems (NeTS) program.
- Initiated program focus in programmable wireless networks (ProWiN) that exploits flexible radios to address need for pervasive and reliable wireless networking services with more effective use of spectrum.
- Initiated NSF Wireless Networking Principal Investigator Meeting series, and co-founded IEEE Symposium on Dynamic Spectrum Networks (DySPAN) to promote NSF NeTS ProWiN efforts.
- Oversight responsibility for over $70 million in multi-organizational networking research efforts in wireless networking, cybersecurity, optical networking, and scientific applications. Responsible for over $50 million in new research and infrastructure awards in new programs.

AMBIENT COMPUTING — Lawrence, Kansas
March 2000 – August 2003, President and CEO

- Co-founder of wireless networking and pervasive computing company with focus on wireless smart devices with processing capabilities, sensors, and coordination with preferences, location awareness, and security.

NETGAMES USA — Overland Park, Kansas
December 1998 – August 2000, Board of Directors

- Co-founder of network gaming company with focus on statistics collection and presentation.
- Online service grew to support over 1 million game players and generated 2.5 million page views per month.
- Served as Chief Scientist and corporate Secretary.
- Company acquired by Microsoft in 2000. Technology was incorporated into the X-Box Live system.

CAMBRIDGE UNIVERSITY — Cambridge, England
July 1996 – June 1997, Visiting Scholar

OLIVETTI & ORACLE RESEARCH LABORATORY — Cambridge, England
July 1996 – June 1997, Consultant

- Research in the area of mobile computing and communications networks.
- Lectures on VLSI, microprocessors, and high speed networking.
- Affiliated with Corpus Christi College.

ROME LABORATORIES — Hanscom AFB, Bedford, Massachusetts
Summer 1991, AFOSR Summer Faculty Research Program

- Research in Sinusoidal Transform Coder (STC) algorithms.
- Developed a multirate voice mail STC compression technique using parameter space transformations.
- Developed an extremely robust voice packet reconstruction technique for congestion control and recovery applications.

AT&T BELL LABORATORIES — Holmdel, New Jersey
November 1988 – August 1989, Post-doctoral position

- Involved in the design and implementation of a high-speed packet network and interface for multimedia traffic.
- Studied packet switch architectures for networks requiring high throughput and low delay.
- Implemented parts of the user interface for a multimedia terminal.
- Improved X11 window support for MULGA IC CAD tools.

PRINCETON UNIVERSITY — Princeton, New Jersey
August 1983 – November 1988

- Teaching Assistant for senior digital signal processing course, Fall 1984. Designed laboratory experiments using the TI TMS320, and graded student work.
- Teaching Assistant, graduate course in VLSI layout for signal processing, Spring 1987.
- Installed/modified MULGA tools for local use; assisted students with CMOS design.
- System administrator for a network of thirteen Sun and two Masscomp workstations, running UNIX, connected to the early Internet.

AT&T BELL LABORATORIES — Holmdel, New Jersey
1985 – 1986, Summer and Part-time

- Designed and implemented a real-time packet speech system simulator, and tested packet replacement algorithms.
- Maintained and upgraded various digital speech processing and computing facilities.

GENERAL ELECTRIC CORPORATE RESEARCH &DEVELOPMENT — Schenectady, New York
Summer 1984

- Explored adaptive filtering algorithms for noise cancelling applications in the presence of crosstalk.

LAFAYETTE COLLEGE — Easton, Pennsylvania
1982 – 1983

- Teaching assistant for junior electromagnetics course, Fall 1982 and Spring 1983.
- Teaching assistant for introductory microprocessor course, Spring 1983.

COMPUTER SCIENCES CORPORATION — Moorestown, New Jersey
Summer 1982

- Performed programming on display system of Aegis defense system for U.S. Navy.

JOURNAL PUBLICATIONS

31. J. B. Evans, B. J. Ewy, M. T. Swink, S. G. Pennington, D. J. Siquieros, S. L. Earp, "TIGR: The Tactical Ground Reporting System", *IEEE Communications Magazine*, v51, n10, October 2013, pp. 42-49.

30. D. T. Fokum, V. S. Frost, M. Kuehnhausen, D. DePardo, A. N. Oguna, L. Searl, E. Komp, M. Zeets, D. D. Deavours, J. B. Evans, G. J. Minden, "An Open-System Transportation Security Sensor Network: Field-Trial Experiences", *IEEE Transactions on Vehicular Technology*, October 2010, v59n8, pp. 3942-3955.

29. P. G. Lazarou, J. Baca, V. S. Frost, J. B. Evans, "Describing Network Traffic Using the Index of Variability", *IEEE/ACM Transactions on Networking*, October 2009, v17n5, pp. 1672-1683.

28. T. R. Newman, D. DePardo, A. M. Wyglinski, J. B. Evans, R. Rajbanshi, V. R. Petty, D. Datla, F. Weidling, P. J. Kolodzy, M. J. Marcus, G. J. Minden, J. A. Roberts, "Measurements and Analysis of Secondary User Device Effects on Digital Television Receivers", EURASIP Journal on Advances in Signal Processing, v2009, id 510867, August 2009.

27. G. D. Troxel, E. Blossom, S. Boswell, A. Caro, I. Castineyra, A. Colvin, T. Dreier, J. B. Evans, N. Goffee, K. Haigh, T. Hussain, V. Kawadia, D. Lapsley, C. Livadas, A. Medina, J. Mikkelson, G. J. Minden, R. Morris, C. Partridge, V. Raghunathan, R. Ramanathan, C. Santivanez, T. Schmid, D. Sumorok, M. Srivastava, R. S. Vincent, D. Wiggins, A. Wyglinski, S. Zahedi, "Enabling Open-source Cognitively-controlled Collaboration Among Software-defined Radio Nodes", *Computer Networks*, v52, n4, March 2008, pp. 898-911. Revised version of "Adaptive Dynamic Radio Open-source Intelligent Team (ADROIT): Cognitively-controlled Collaboration among SDR Nodes", *1st IEEE Workshop on Networking Technologies for Software Defined Radio (SDR) Networks*, Reston, Virginia, September 2006.

26. T. R. Newman, R. Rajbanshi, A. M. Wyglinski, J. B. Evans, G. J. Minden, "Population Adaptation for Genetic Algorithm-based Cognitive Radios", *ACM/Springer Mobile Networks and Applications (MONET)*, v13, n5, October 2008. Also in *Second International Conference on Cognitive Radio Oriented Wireless Networks and Communications (CrownCom 2007)*, Orlando, Florida, August 2007.

25. D. Raychaudhuri, X. Jing, K. Le, I. Seskar, J. B. Evans, "Cognitive Radio Technology: From Distributed Spectrum Coordination to Adaptive Network Collaboration", *Pervasive and Mobile Computing (PMC)*, February 2008.

24. T. Newman, B. Barker, A. M. Wyglinski, A. Agah, J. B. Evans, G. J. Minden, "Cognitive Engine Implementation for Wireless Multicarrier Transceivers", *Wiley Wireless Communications and Mobile Computing*,

v7, n9, November 2007, pp. 1129-1142.

23. G. J. Minden, J. B. Evans, L. Searl, D. DePardo, R. Rajbanshi, J. Guffey, Qi Chen, T. Newman, V. R. Petty, F. Weidling, M. Peck, B. Cordill, D. Datla, B. Barker, A. Agah, "An Agile Radio for Wireless Innovation", *IEEE Communications Magazine*, May 2007.

22. J. B. Evans, W. Wang, B. J. Ewy, "Wireless Networking Security: Open Issues in Trust, Management, Interoperation, and Measurement", *Int. J. Networking and Security*, v1 n1, 2006, pp. 84-94.

21. A. B. Kulkarni, G. J. Minden, V. S. Frost, J. B. Evans, "Survivability of Active Networking Services", *Lecture Notes in Computer Science*, Springer, v1653, February 2004, pp. 299-306. Also in *1999 Int. Workshop on Active Networks*, July 1999.

20. G. Y. Lazarou, V. S. Frost, J. B. Evans, D. Niehaus, "Simulation & Measurement of TCP/IP over ATM Wide Area Networks", *High-Performance Backbone Network Technologies*, Marcel Dekker, Optical Engineering series v88, May 2004, pp. 413-420. Also in *IEICE Transactions on Communications Special Issue on ATM Switching Systems for Future B-ISDN*, vE81B, n2, February 1998, pp. 307-314.

19. S. Radhakrishnan, V. S. Frost, J. B. Evans, "Quality of Service for Rapidly Deployable Radio Networks", *Telecommunications Systems Journal*, v18, n1-3, September - November 2001, pp. 207-225.

18. R. Prabagaran, J. B. Evans, "An Architecture for Scalable MPLmS VPNs", *SPIE Optical Network Magazine*, v2, n2, March/April 2001, pp. 66-72.

17. C. Charalambos, V. S. Frost, J. B. Evans, "Performance of TCP Extensions on Noisy High BDP Networks", *IEEE Communications Letters*, v3, n10, October 1999, pp. 294-296.

16. C. Charalambos, V. S. Frost, J. B. Evans, "Performance Evaluation of TCP Extensions on ATM over High Bandwidth Delay Product Networks", *IEEE Communications Magazine*, v37, n7, July 1999, pp. 57-63.

15. J. B. Evans, G. J. Minden, K. S. Shanmugan, G. Prescott, V. S. Frost, B. Ewy, R. Sanchez, C. Sparks, K. Malinimohan, J. Roberts, R. Plumb, D. W. Petr, "The Rapidly Deployable Radio Network", *IEEE Journal on Selected Areas in Communications*, v17 n4, April 1999, pp. 689-703.

14. R. Sanchez, J. Evans, G. Minden, V. Frost and K. S. Shanmugan, "RDRN: A Prototype for a Rapidly Deployable Radio Network", *ACM Mobile Computing & Communications Review*, v2 n2, April 1998, pp. 15-22.

13. F. Bennett, D. Clarke, J. Evans, A. Hopper, A. Jones, D. Leask, "Piconet - Embedded Mobile Networking," *IEEE Personal Communications*, v4 n5, October 1997, pp. 8-15.

12. L. Dasilva, J. Evans, D. Niehaus, V. Frost, R. Jonkman, B. Lee, G. Lazarou, "ATM WAN Performance Tools, Experiments, and Results", *IEEE Communications Magazine*, v35, n8, August 1997, pp. 118-125.

11. S. F. Bush, S. Jagannath, R. Sanchez, J. B. Evans, V. S. Frost, G. J. Minden, K. S. Shanmugan, "A Control and Management Network for Wireless ATM Systems", *ACM/Baltzer Wireless Information Networks (WINET) Journal*, v3 n4, July 1997, pp. 267-283.

10. S. Y. Cheng, J. B. Evans, "Implementation of Signal Power Estimation Methods", *IEEE Trans. Circuits & Systems - II*, v44 n3, March 1997, pp. 240-250.

9. S. F. Bush, J.B. Evans, V. S. Frost, "Mobile ATM Buffer Capacity Analysis", *ACM/Baltzer Mobile Networks and Nomadic Applications (NOMAD): Topical Journal on Mobility of Systems, Users, Data and Computing*,Vol.1, No. 1, January 1996.

8. J. B. Evans, D. Niehaus, D. W. Petr, V. S. Frost, G. J. Minden, B. J. Ewy, "A 622 Mb/s LAN/WAN Gateway and Experiences with Wide-Area ATM Networking", *IEEE Network*, v10 n3, May/June 1996, pp. 40-48.

7. Y. C. Lim, J. B. Evans, B. Liu, "An Efficient Bit-Serial FIR Filter Architecture" *Circuits, Systems, & Signal Processing*, v15 n5, May 1995, pp. 639-651.

6. S. Mohanakrishnan, J. B. Evans, "Automatic Implementation of FIR Filters on Field Programmable Gate Arrays", *IEEE Signal Processing Letters*, v2 n3, March 1995, pp. 51-53.

5. J. B. Evans, "Efficient FIR Filter Architectures Suitable for FPGA Implementation", *IEEE Trans. Circuits and Syst.*, v41 n7, July 1994, pp. 490-493.

4. C. N. Gupta, J. B. Evans, G. J. Minden, "Reconfigurable ATM Transmitter/Receiver Implementation", *IEE Electronics Letters*, v29 n24, November 25, 1993, pp. 2193-2140.

3. J. B. Evans, P. Xue, and B. Liu, "Analysis and Implementation of Variable Step Size Adaptive Algorithms", *IEEE Trans. Signal Processing*, v41 n8, August 1993, pp. 2517-2535.

2. G. Mirchandani, R. L. Zinser, Jr., and J. B. Evans, "A New Adaptive Noise Cancellation Scheme in The Presence of Crosstalk", *IEEE Trans. Circuits and Syst.*, v39 n10, October 1992, pp. 681-694.

1. Y. C. Lim, J. B. Evans, and B. Liu, "Decomposition of Binary Integers into Signed Power-of-Two Terms", *IEEE Trans. Circuits and Syst.*, v38 n6, June 1991, pp. 667-672.

REFEREED CONFERENCE AND WORKSHOP PUBLICATIONS

101. S. Ju, J.B. Evans, "Modeling and Analysis of CogNet Architecture for Cognitive Radio Networks", *2011 IEEE International Workshop on Recent Advances in Cognitive Communications and Networking (RACCN) at IEEE Globecom 2011*, Houston, Texas, December 2011.

100. S. Ju, J.B. Evans, "Cognitive Multipath Multi-Channel Routing Protocol for Mobile Ad-Hoc Networks", *IEEE Globecom 2010 Symposium on Selected Areas in Communications*, Miami, Florida, December 2010.

99. S. Ju, J.B. Evans, "Scalable Cognitive Routing Protocol for Mobile Ad-Hoc Networks", *IEEE Globecom 2010 Symposium on Selected Areas in Communications*, Miami, Florida, December 2010.

98. D. Fokum, V. Frost, D. DePardo, M. Kuehnhausen, A. Oguna, L. Searl, E. Komp, M. Zeets, D. Deavours, J. B. Evans, G. Minden, "Experiences from a Transportation Security Sensor Network Field Trial", *3rd IEEE Workshop on Enabling the Future Service-Oriented Internet*, Honolulu, Hawaii, 4 December 2009.

97. S. Ju, J.B. Evans, "Spectrum-Aware Routing Protocol for Cognitive Ad-Hoc Networks", *IEEE Globecom 2009 Symposium on Selected Areas in Communications*, Honolulu, Hawaii, November 2009.

96. B. J. Ewy, M. T. Swink, S. G. Pennington, J. B. Evans, J. M. Kim, C. Ling, S. L. Earp, M. Maeda, "TIGR in Iraq and Afghanistan: Network-Adaptive Distribution of Media Rich Tactical Data", *IEEE MILCOM 2009*, Boston, Massachusetts, October 2009.

95. B. Quanz, H. Fei, J. Huan, J. B. Evans, V. Frost, G. Minden, D. Deavours, L. Searl, D. DePardo, M. Kuehnhausen, D. Fokum, M. Zeets, A. Oguna, "Anomaly Detection with Sensor Data for Distributed Security", *ICCCN 2009 Workshop on Sensor Networks (SN 2009)*, San Francisco, California, August 2009.

94. S. Ju, J. B. Evans, "Mobility-Aware Routing Protocol for Mobile Cognitive Networks", *IEEE CogNet 2009 Workshop*, Dresden, Germany, June 2009.

93. S. Ju, J. B. Evans, "Spectrum-Aware Routing Protocol for Cognitive Ad-Hoc Networks", *2009 Virginia Tech Wireless Communications Symposium*, Blacksburg, Virginia, June 2009.

92. V. S. Frost, G. J. Minden, J. B. Evans, L. S. Searl, E. Komp, D. Depardo, M. Kuehnhausen, M. Zeets, D. T. Fokum, A. N. Oguna, "Service Oriented Architecture for Monitoring Cargo in Motion Along Trusted Corridors", poster at *HotMobile 2009 - 10th Workshop on Mobile Computing, Systems, and Applications*, Santa Cruz, CA, USA, February 23-24, 2009.

91. T. Newman, J. B. Evans, "Parameter Sensitivity in Cognitive Radio Adaptation Engines", *3rd IEEE International Symposium on Dynamic Spectrum Access Networks (DySPAN 2008)*, Chicago, Illinois, October 2008.

90. G. Kimmell, E. Komp, G. J. Minden, J. B. Evans, P. Alexander, "Synthesizing software Defined Radio components from Rosetta", *2008 Forum on Specification, Verification and Design Languages (FDL 2008)*, Stuttgart, Germany, 23-25 September 2008.

89. S. Ju, J. B. Evans, "Intelligent Multi-Path Selection based on Parameters Prediction", *IEEE CogNet 2008 Workshop*, Beijing, China, May 2008.

88. T. Rondeau, K. Nolan, L. Doyle, D. Sicker, C. Doerr, D. Grunwald, G. Minden, J. Evans, "International Collaboration for a Cognitive Radio Testbed", *2007 Software Defined Radio Technical Conference*, Denver, Colorado, November 2007.

87. M. Pitchaimani, B. J. Ewy, J. B. Evans, "Evaluating Techniques for Network Layer Independence in Cognitive Networks", *IEEE CogNet 2007 Workshop*, Glasgow, Scotland, June 2007.

86. R. Rajbanshi, V. R. Petty, D. Datla, F. Weidling, D. DePardo, P. Kolodzy., M. Marcus., A. M. Wyglinski, J. B. Evans, G. J. Minden, J. A. Roberts, "Feasibility of Dynamic Spectrum Access in Underutilized Television Bands", *2nd IEEE International Symposium on Dynamic Spectrum Access Networks (DySPAN 2007)*, Dublin, Ireland, April 2007.

85. G. J. Minden, J. B. Evans, L. Searl, D. DePardo, V. R. Petty, R. Rajbanshi, J. Guffey, Q. Chen, T. Newman, F. Weidling, D. Datla, B. Barker, M. Peck, B. Cordill, A. M. Wyglinski, A. Agah, "KUAR: A Flexible Software-Defined Radio Development Platform", *2nd IEEE International Symposium on Dynamic Spectrum Access Networks (DySPAN 2007)*, Dublin, Ireland, April 2007.

84. R. Rajbanshi, Q. Chen, A. Wyglinski, G.J. Minden, J. Evans, "Quantitative Comparison of Agile Modulation Techniques for Cognitive Radio Transceivers", *1st IEEE Workshop on Cognitive Radio Networks*, Las Vegas, Nevada, January 11, 2007.

83. D. Raychaudhuri, N. Mandayam, J. B. Evans, B. J. Ewy, S. Seshan, P. Steenkiste, "CogNet - An Architecture for Experimental Cognitive Radio Networks within the Future Internet", *1st ACM/IEEE International Workshop on Mobility in the Evolving Internet Architecture (MobiArch 2006)*, San Francisco, December 1, 2006.

82. G. D. Troxel, E. Blossom, S. Boswell, A. Caro, I. Castineyra, A. Colvin, T. Dreier, J. B. Evans, N. Goffee, K. Haigh, T. Hussain, V. Kawadia, D. Lapsley, C. Livadas, A. Medina, J. Mikkelson, G. J. Minden, R. Morris, C. Partridge, V. Raghunathan, R. Ramanathan, C. Santivanez, T. Schmid, D. Sumorok, M. Srivastava, R. S. Vincent, D. Wiggins, A. Wyglinski, S. Zahedi, "Adaptive Dynamic Radio Open-source Intelligent Team (ADROIT): Cognitively-controlled Collaboration among SDR Nodes", *1st IEEE Workshop on Networking Technologies for Software Defined Radio (SDR) Networks*, Reston, Virginia, September 2006.

81. D. Trajkov, J. B. Evans, J. A. Roberts, "Spectrum Sharing for Directional Systems", *1st International Workshop on Technology and Policy for Accessing Spectrum (TAPAS 2006)*, Boston, Massachusetts, August 5, 2006.

80. R. Rajbanshi, Q. Chen, A. M. Wyglinski, J. B. Evans, G. J. Minden, "Comparative Study of Frequency Agile Data Transmission Schemes for Cognitive Radio Transceivers", *1st International Workshop on Technology and Policy for Accessing Spectrum (TAPAS 2006)*, Boston, Massachusetts, August 5, 2006.

79. M. Thaker, J. B. Evans, J. A. Roberts, "Evaluation of Media Access Control Protocols for Broadband Wireless Local Loop", *2003 WNCG Wireless Networking Symposium*, Austin, Texas, October 22-24, 2003.

78. L. M. Sanders, J. B. Evans, B. J. Ewy, "A Configuration Protocol for Embedded Network Devices on Secure Wireless Networks", *2003 High Performance Embedded Computing (HPEC) Workshop*, MIT Lincoln Laboratory, September 22-25, 2003.

77. D. Andrews, J. B. Evans, V. Mangipudi, A. Mandapaka, "SCIMPS - An Integrated Approach to Distributed Processing in Sensor Webs", *11th International Workshop on Parallel and Distributed Real-Time Systems*, Nice, France, April 22-23, 2003.

76. J. M. Davis, J. B. Evans, B. J. Ewy, L. M. Sanders, "Application of Operating System Concepts to Coordination in Pervasive Sensing and Computing Systems", *2002 High Performance Embedded Computing (HPEC) Workshop*, MIT Lincoln Laboratory, September 24-26, 2002.

75. G. J. Minden, J. B. Evans, S. Baliga, S. Rallapalli, L. Searl, "Routing in Space Based Internets", *NASA 2002 Earth Science Technology Conference*, Pasadena, California, June 2002.

74. D. Andrews, J. B. Evans, "A Virtual Global Bus Active Messaging Protocol for Sensor Webs", *1st International Workshop on Real-Time LANs in the Internet Age (RTLIA2002)*, Vienna, Austria, June 2002.

73. G. J. Minden, E. Komp, S. Ganje, M. Kannan, S. Subramaniam, S. Tan, S. Vallabhaneni, J. B. Evans, "Composite Protocols for Innovative Active Services", *DARPA Active Networks Conference and Exposition (DANCE 2002)*, San Francisco, California, May 29-31, 2002.

72. S. Krishnaswamy, J. B. Evans, G. J. Minden, "A Prototype Framework for Providing Hop-by-Hop Security in an Experimentally Deployed Active Network", *DARPA Active Networks Conference and Exposition (DANCE 2002)*, San Francisco, California, May 29-31, 2002.

71. H. Sitaraman, J. M. Davis, J. B. Evans, "Broadband Wireless Local Loop Evaluation via an Active TCP Connection Monitoring Methodology", *IEEE Workshop on Wireless Local Networks*, Tampa, Florida, November 14-16, 2001.

70. R. Prabagaran, J. B. Evans, "Experiences with Class of Service (CoS) Translations in IP/MPLS Networks", *26th Annual IEEE Conf. Local Computer Networks*, Tampa, Florida, November 2001.

69. J. B. Evans, G. J. Minden, L. Searl, P. Wagh, "Space Based Internet Emulation", *NASA 2001 Earth Science Technology Conference*, College Park, Maryland, August 2001.

68. B. Tierney, D. Gunter, J. Lee, M. Stoufer, J. B. Evans, "Enabling Network-Aware Applications", *10th IEEE Symposium on High Performance Distributed Computing*, San Francisco, California, August 2001.

67. S. Mukthavaram, J. B. Evans, "Exploiting FPGA Reconfiguration To Implement An Adaptive Demodulator", *IEEE CAS Workshop on Wireless Communications and Networking*, Notre Dame, Indiana, August 2001.

66. J. B. Evans, T. Buller, "The End of History", *2001 Gigabit Networking Workshop*, Anchorage, Alaska, April 2001.

65. C. J. Peña, J. B. Evans, "Performance Evaluation of Software Virtual Private Networks (VPNs)", *25th Annual IEEE Conf. Local Computer Networks*, Tampa, Florida, November 2000.

64. S. Mathen, J. B. Evans, E. Komp, G. J. Minden, "Intelligent Module Descriptions in the Implementation of Software Radios", *2000 IEEE Workshop on Signal Processing Systems*, Lafayette, Louisiana, October 2000.

63. S. Mathen, J. B. Evans, E. Komp, G. J. Minden, "High Level Abstractions for Implementation of Software Radios", *2000 Int. Conf. Signal Processing Appl. and Tech.*, Dallas, Texas, October 2000.

62. S. Mathen, J. B. Evans, "FPGA Implementation of an Adaptive Reconfigurable Image Encoder", *Fourth Annual Workshop on High Performance Embedded Computing*, Lexington, Massachusetts, September 2000.

61. G. J. Minden, J. B. Evans, "Ambient Computational Environments", *IEEE International Workshop on Pervasive Computing*, Toronto, Canada, August 2000.

60. S. Radhakrishnan, V. S. Frost, J. B. Evans, "Quality of Service for Rapidly Deployable Radio Networks", *33rd Hawaii International Conf. on System Sciences*, January 2000.

59. R. Sanchez, J. B. Evans, G. J. Minden, "Networking on the Battlefield: Challenges in Highly Dynamic Multi-hop Wireless Networks", *IEEE MILCOM 1999*, November 1999.

58. S. Sheth, J. Evans, A. Kulkarni, G. Minden, "Implementation of an Active Congestion Control Scheme in Narrowband ATM Networks", *Thirty-Seventh Allerton Conf. on Comm., Control, & Computing*, Monticello, Illinois, September 1999.

57. S. Mukthavaram, J. B. Evans, "Design and FPGA Implementation of a Reconfigurable Demodulator", *Third Annual Workshop on High Performance Embedded Computing*, Lexington, Massachusetts, September 1999.

56. A. B. Kulkarni, G. J. Minden, J. B. Evans, V. S. Frost, "Survivability of Active Networking Services", *1999 Int. Workshop on Active Networks*, July 1999.

55. S. Mukthavaram, S. G. Mathen, J. B. Evans, M. J. Ashley, G. J. Minden, G. E. Prescott, "Environments for the Implementation of Radio Processing Functions – A Case Study", *11th Euromicro Conf. on Real-Time Systems*, June 1999.

54. S. G. Pennington, K. Stump, J. B. Evans, "VPN Performance Issues on Gigabit Routers," *1999 Gigabit Networking Workshop*, New York, New York, March 1999.

53. R. Sanchez, F. Wahhab, J. B. Evans, V. S. Frost, G. J. Minden, "Design and Evaluation of an Adaptive Data Link Control Protocol for Wireless ATM Networks, *IEEE 1998 Global Telecom. Conf. (Globecom '98)*, Sydney, Australia, November 1998.

52. R. Sanchez, J. B. Evans, G. J. Minden, V. S. Frost, K. S. Shanmugan, "RDRN: A Rapidly Deployable Radio Network - Implementation and Experience", *1998 IEEE International Conference on Universal Personal Communications*, October 1998.

51. C. P. Charalambos, G. Y. Lazarou, V. S. Frost, J. Evans, R. Jonkman, "Experimental and Simulation Performance Results of TCP/IP over High-Speed ATM over ACTS", *1998 IEEE International Conference on Communications*.

50. J. B. Evans, V. S. Frost, G. J. Minden, "Service Independent Access Points (SIAP) to Optical Wide Area Networks," *1998 IEEE Gigabit Networking Workshop*, March 1998.

49. L. Dasilva, J. Evans, D. Niehaus, V. Frost, R. Jonkman, B. Lee, G. Lazarou, "Performance Experiences in a Wide Area ATM Network", *IEEE Int. Conf. Comm.*, June 1997, pp. 1694-1698.

48. I. Richer, J. B. Evans, "MAGIC-II," *1997 IEEE Gigabit Networking Workshop*, April 1997.

47. S. F. Bush, V. S. Frost, J. B. Evans, "Predictive Systems in Network Management with Mobility", *1996 IEEE Symp. on Planning & Design of Broadband Networks*, October 1996.

46. A. B. Kulkarni, G. J. Minden, J. B. Evans, V. S. Frost, "An Active Network Architecture for ATM WANs", *3rd Int. Workshop on Mobile Multimedia Comm.*, September 1996. Selected for publication in, Mobile Multimedia Communications, Plenum Publishing, Chap. 3, Nov 1997.

45. J. B. Evans, V. S. Frost, D. Niehaus, D. W. Petr, G. J. Minden, B. J. Ewy, "A 622 Mb/s ATM LAN/WAN Gateway with Cell Level Measurement and Pacing Capabilities", *IEEE Hot Interconnects IV*, August 1996.

44. G. Y. Lazarou, J. B. Evans, D. Niehaus, V. S. Frost, "Using Measurements to Validate Simulation Models of TCP/IP over High Speed ATM Wide Area Networks", *IEEE Int. Conf. Comm.*, June 1996.

43. S. F. Bush, S. Jagannath, J. B. Evans, V. S. Frost, "A Control and Management Network for Wireless ATM Systems", *IEEE Int. Conf. Comm.*, June 1996.

42. M. T. Swink, J. B. Evans, V. S. Frost, "Over The Shoulder: Real-Time Collaboration Over High Speed Networks", *1996 IEEE Gigabit Networking Workshop*, March 1996.

41. H. Zhu, L. A. DaSilva, J.B. Evans, V. S Frost, "Performance Evaluation of Congestion Control Mechanisms in ATM Networks", *20th Int. Conf. Computer Measurement Group*, December, 1995.

40. V. Sirkay, D. Niehaus, J. B. Evans, W. Edwards, "Real Time Implementation of an Adaptive Shaper for Dynamic Bandwidth Allocation in ATM Networks", *IEEE ATM '95 Workshop*, October 1995, pp. W3A:11-W3A:22.

39. B. J. Ewy, J. B. Evans, V. S. Frost, G. J. Minden, "TCP/ATM Experiences in the MAGIC Testbed", *Fourth IEEE Symp. High Perf. Dist. Comp.*, August 1995, pp. 87-93.

38. C. Braun, V. Sirkay, H. Uriona, S. Seetharam, E. Yousefi, D. Petr, D. Niehaus, V. S. Frost, J. B. Evans, G. J. Minden, "A High Speed Implementation of Adaptive Shaping for Dynamic Bandwidth Allocation", *Fourth IEEE Symp. High Perf. Dist. Comp.*, August 1995, pp. 94-101.

37. C. Deniau, M. Swink, R. Aust, J. Evans, S. Gauch, J. Miller, D. Niehaus, "The UNITE System: Distributed Delivery and Contribution of Multimedia Objects Over the Internet", *INET '95*, June 1995, pp. A3.3.1-A3.3.8.

36. J. B. Evans, V. S. Frost, D. Niehaus, D. W. Petr, "Network Integrated Processing", *1995 IEEE Gigabit Networking Workshop*, April 1995.

35. J. B. Evans, L. Dasilva, H. Zhu, V. S. Frost, "Credit-Based Flow Control for ATM Networks Revisited", *1995 IEEE Gigabit Networking Workshop*, April 1995.

34. K. Medhat, J. B. Evans, J. A. Roberts, "A New Simulation Approach for Modeling Intelligent Networks Based on Signaling System No. 7", *1995 Midwest Electro-Tech. Conf.*, March 1995, pp. 108-111.

33. S. S. Kapadia, N. I. Ansari, J. B. Evans, "Sinusoidal Transform Coder Based Congestion Control in Integrated Voice/Data Networks", *1994 Int. Conf. Signal Processing Appl. and Tech.*, October 1994, pp. 310-313.

32. S. Mohanakrishnan, J. B. Evans, "A Framework for the Design of High Speed FIR Filters on FPGAs", *1994 Int. Conf. Signal Processing Appl. and Tech.*, October 1994.

31. S. Gauch, R. Aust, J. B. Evans, J. Gauch, G. Minden, D. Niehaus, J. Roberts, "The Digital Video Library System: Vision and Design", *Proc. Digital Libraries '94*, June 1994.

30. C. N. Gupta, J. B. Evans, "Performance Scalability of ATM Networks", *1994 IEEE INFOCOM*, June 1994.

29. B. J. Ewy, J. B. Evans, V. S. Frost, G. J. Minden, "TCP and ATM in Wide Area Networks", *1994 IEEE Gigabit Networking Workshop*, June 1994.

28. S. W. Seetharam, G. J. Minden, J. B. Evans, "A Single Chip Implementation of Receive Path Termination for SONET OC-12c and Quadruple OC-3c", *1994 IEEE Int. Symp. Circuits and Syst.*, May 1994, pp 3.237-3.240.

27. S. W. Seetharam, G. J. Minden, J. B. Evans, "A Pipelined Architecture to Map ATM Cells to 622 Mbps SONET OC-12 Payloads", *1994 IEEE Int. Symp. Circuits and Syst.*, May 1994, pp 3.245-3.248.

26. R. J. Sanchez, G. J. Minden, J. B. Evans, "DISNES: A Distributed Network Emulation System for Gigabit Networks", *1994 IEEE Comp. Aided Design and Modeling Workshop*, April 1994.

25. N. I. Ansari, S. S. Kapadia, J. B. Evans, "A Narrowband Adaptive Voice/Data Switch," *1994 IEEE Wichita Conf. on Comm., Networking, and Signal Proc.*, April 1994.

24. S. W. Seetharam, J. B. Evans, G. J. Minden, "The Need for Efficient Flow Control in High Speed Wide Area Networks", *1994 IEEE Wichita Conf. on Comm., Networking, and Signal Proc.*, April 1994.

23. G. J. Minden, J. B. Evans, V. S. Frost, D. W. Petr, "Implementation of an OC-12c and 4-by-OC-3c ATM/SONET Gateway Based on Xilinx FPGAs", *1994 Gigabit Mini-Jamboree*, Jan. 1994.

22. S. Seetharam, J. B. Evans, G. J. Minden, D. W. Petr, V. S. Frost, "Implementation of Per VC Credit-Based Batch Acknowledgments and ATM Cell Pacing Schemes At 622 Mbps", *1994 Gigabit Mini-Jamboree*, Jan. 1994.

21. G. J. Minden, J. B. Evans, D. W. Petr, V. S. Frost, "An ATM WAN/LAN Gateway Architecture", *Second IEEE Symp. High Perf. Dist. Comp.*, July 1993.

20. J. B. Evans, G. J. Minden, D. W. Petr, V. S. Frost, "An ATM WAN/LAN Gateway Architecture", *Fourth Gigabit Testbed Workshop*, June 1993.

19. D. W. Petr, J. B. Evans, L. Neir, J. Singh, V. S. Frost, "Access Traffic Control Implementations for Frame Relay", *1993 IEEE Int. Conf. Comm.*, June 1993.

18. J. B. Evans, "An Efficient FIR Filter Architecture," *1993 IEEE Int. Symp. Circuits and Syst.*, May 1993, pp. 627-630.

17. S. W. Seetharam, G. J. Minden, J. B. Evans, "A Parallel SONET Scrambler/Descrambler Architecture", *1993 IEEE Int. Symp. Circuits and Syst.*, May 1993, pp. 2011-2014.

16. J. B. Evans, "Analysis of a Low Complexity Variable Step Size Algorithm", *1993 IEEE Int. Conf. Acoust., Speech, Signal Processing*, Apr. 1993.

15. T. G. Champion, J. B. Evans, "A Flexible Multirate Speech Coder", *1993 Int. Conf. Signal Processing Appl. And Tech.* , September 1993, pp. 1440-1443.

14. C. J. Chou, S. Mohanakrishnan, J. B. Evans, "FPGA Implementation of Digital Filters", *1993 Int. Conf. Signal Processing Appl. and Tech.*, September 1993, pp. 80-88. Selected as one of top eleven papers of 256 presented. Condensed version appeared in *Electronic Engineering Times*, Sept. 27, 1993 as "FPGAs Can Be Used to Implement Digital Filters".

13. J. B. Evans, E. Duron, Y. Wang, "Analysis and Implementation of a Priority Knockout Switch," *1993 IEEE INFOCOM.*

12. L. Y. Soh and J. B. Evans, "Modeling and Simulation of High Speed Optical Logic Devices Using Semiconductor Lasers and Light Emitting Diodes", *1993 Midwest Electro-Tech. Conf.*, Mar. 1993.

11. S. B. Drumm and J. B. Evans, "An ATM Receiver Implementation", *1993 Midwest Electro-Tech. Conf.*, Mar. 1993.

10. J. B. Evans and T. G. Champion, "Robust Parametric Speech Coding and Reconstruction Techniques," *1992 Int. Conf. Signal Processing Appl. and Tech.*, November 1992, pp. 928-931.

9. S. Y. Cheng and J. B. Evans, "Implementation of Signal Power Estimation Methods," *1992 IEEE Int. Symp. Circuits and Syst.*, May 1992.

8. Y. Wang and J. B. Evans, "Implementation of a Priority Knockout Switch Architecture," *1992 Midwest Electro-Tech. Conf.*, Mar. 1992.

7. B. Yu and J. B. Evans, "An Internet Voice Mail Protocol," *1992 Midwest Electro-Tech. Conf.*, Mar. 1992.

6. J. B. Evans, "A New Variable Step Size Method Suitable for Efficient VLSI Implementation," *Proc. 1991 IEEE Int. Conf. Acoust., Speech, Signal Processing.*

5. J. B. Evans, Y. C. Lim, and B. Liu, "A High Speed Programmable Digital FIR Filter," *Proc. 1990 IEEE Int. Conf. Acoust., Speech, Signal Processing.*

4. Y. C. Lim, B. Liu, and J. B. Evans, "VLSI Circuits for Decomposing Binary Integers into Signed Power-of-Two Terms," *Proc. 1990 IEEE Int. Symp. Circuits and Systems.*

3. J. B. Evans and B. Liu, "A CMOS Implementation of a Variable Step Size Digital Adaptive Filter," *Proc. 1989 IEEE Int. Conf. Acoust., Speech, Signal Processing.*

2. J. B. Evans and B. Liu, "Variable Step Size Methods for the LMS Adaptive Algorithm," *Proc. 1987 IEEE Int. Symp. Circuits and Systems.*

1. R. L. Zinser, Jr., G. Mirchandani, and J. B. Evans, "Some Experimental and Theoretical Results Using a New Adaptive Filter Structure for Noise Cancellation in the Presence of Crosstalk," *Proc. 1985 IEEE Int. Conf. Acoust., Speech, Signal Processing.*

INVITED CONFERENCE AND WORKSHOP PUBLICATIONS

4. S. Chen, T. R. Newman, J. B. Evans, A. M. Wyglinski, "Genetic Algorithm-Based Optimization for Cognitive Radio Networks", *2010 IEEE Sarnoff Symposium*, Princeton, New Jersey, April 2010, pp. 1-6.

3. M. Pitchaimani, D. Jeyaraman, J. B. Evans, "Adaptive Network Layer for Cognitive Radio Networks", *Third International Conference on Cognitive Radio Oriented Wireless Networks and Communications (CrownCom 2008)*, Singapore, May 2008.

2. J. B. Evans and B. Liu, "Some Low Power Implementations of DSP Algorithms", *Proc. 1992 Int. Conf. Appl. Spec. Array Process.*

1. J. B. Evans and B. Liu, "Some Low Power Implementations of DSP Algorithms", *Proc. 1991 Int. Conf. DSP.*

INVITED BOOK CHAPTERS AND SECTIONS

9. S. Ju, J. B. Evans, "Cognitive Routing Protocols and Architecture", chapter in *Next-Generation Internet Architectures and Protocols*, B. Ramamurthy, G. Rouskas, and K.M. Sivalingam, editors, Cambridge University Press, 2011.

8. T. Newman, J. B. Evans, A. M. Wyglinski, "Reconfiguration, Adaptation, and Optimization", chapter in *Cognitive Radio Communications and Networks - Principles and Practice*, A. M. Wyglinski, M. Nekovee, Y. T. Hou, editors, Elsevier, 2009.

7. T. Newman, M. Pitchaimani, B. J. Ewy, J. B. Evans, "Architectures for Cognition in Radios and Networks", chapter in *Cognitive Radio Networks*, Y. Xiao and F. Hu, editors, Auerbach Publications, CRC Press, 2009.

6. J. B. Evans, T. Newman, "VLSI Implementation of Digital Filters", invited section in *Circuit and Filter Handbook, 3rd Edition*, W. K. Chen, editor-in-chief, CRC Press, 2008.

5. J. B. Evans, "Local Area Networks (LANs)", invited section in *Encyclopedia of RF and Microwave Engineering*, K. Chang, editor, Wiley, 2005.

4. J. B. Evans, "Implementation of Digital Filters", invited section in *Circuit and Filter Handbook, 2nd Edition*, W. K. Chen, editor-in-chief, CRC Press, 2002.

3. J. B. Evans, "Local Area Networks (LANs)", *Encyclopaedia of Electrical Engineering*, J. G. Webster, editor, Wiley, 1999.

2. A. B. Kulkarni, G. J. Minden, J. B. Evans, V. S. Frost, "An Active Network Architecture for ATM WANs", *3rd Int. Workshop on Mobile Multimedia Comm.*, September 1996. Selected for publication in Mobile Multimedia Communications, Plenum Publishing, Chap. 3, November 1997.

1. J. B. Evans, "Implementation of Digital Filters", invited section in *Circuit and Filter Handbook*, W. K. Chen, editor-in-chief, CRC Press, 1995, section 16.5.

EDITORIALS

28. T. Alexander, A. Mishra, J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v51, n12, December 2013.

27. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v51, n6, June 2013.

26. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v51, n3, March 2013.

25. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v50, n12, December 2012.

24. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v50, n9, September 2012.

23. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v50, n6, June 2012.

22. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v50, n3, March 2012.

21. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v49, n12, December 2011.

20. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v49, n9, September 2011.

19. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v49, n6, June 2011.

18. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v49, n3, March 2011.

17. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v48, n6, June 2010.

16. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v48, n3, March 2010.

15. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v47, n12, December 2009.

14. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v47, n9, September 2009.

13. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v47, n6, June 2009.

12. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v47, n3, March 2009.

11. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v46, n12, December 2008.

10. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v46, n9, September 2008, pp. 50-50.

9. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v46, n6, June 2008 pp. 48-48.

8. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v46, n3, March 2008, pp. 32-32.

7. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v45, n12, December 2007, pp. 38-38.

6. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v45, n9, September 2007, pp. 38-38.

5. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v45, n6, June 2007 pp. 42-42.

4. C. Cordeiro, B. Daneshrad, J. B. Evans, N. Mandayam, P. Marshall, S. N. Shankar, "Guest editorial: Adaptive, spectrum agile and cognitive wireless networks", *IEEE Journal on Selected Areas in Communications*, v25, n3, April 2007, pp. 513-516.

3. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v45, n3, March 2007, pp. 78-78.

2. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v44, n12, December 2006, pp. 24-24.

1. J. B. Evans, Z. Zvonar, "Guest editorial - Radio Communications Series", *IEEE Communications Magazine*, v44, n6, June 2006, pp. 42-42.

WORKS UNDER REVIEW OR IN PREPARATION

1. J. B. Evans, "Bits at War" (working title), in preparation.

INVITED PRESENTATIONS

80. J. B. Evans, "Reinventing network architectures", *2013 New England Workshop for Software Defined Radio*, Worcester, Massachusetts, May 2013.

79. J. B. Evans, "Cognition in Military Wireless Devices", *MILCOM 2011*, Baltimore, Maryland, November 2011.

78. J. B. Evans, "Simple Answers?", *Self Adaptive Networking Workshop (SAN 2010)*, Budapest, Hungary, September 2010.

77. J. B. Evans, "TIGR – Tactical Ground Reporting System", *MILCOM 2010*, San Jose, California, November 2010.

76. J. B. Evans, "Cognitive Networking for Future Wireless Networks", *MILCOM 2010*, San Jose, California, November 2010.

75. J. B. Evans, "Intelligence in the Network", *Wireless Seminar Series*, Wichita State University, Wichita, Kansas, February 2009.

74. J. B. Evans, "Intelligence in the Network - Future Wireless Networks", *US Army Information and Cyberspace Symposium*, Ft. Leavenworth, Kansas, 23 September 2008.

73. J. B. Evans, "SDRs and Related Research at the University of Kansas", *JTRS Science and Technology Forum 2 (JSTeF 2)*, San Diego, 17 September 2008.

72. J. B. Evans, "Can We Make Rapid Progress in the Absence of Standards?", *Microsoft Research Cognitive Wireless Networking Summit* Panel on Policy Issues, Snoqualmie, Washington, 5 June 2008.

71. J. B. Evans (presenter), G. J. Minden, "Building Cognitive Radio Networks", *Microsoft Research Cognitive Wireless Networking Summit*, Snoqualmie, Washington, 5 June 2008.

70. J. B. Evans, "Cognitive Radio Wireless Networking: An Emerging Frontier", *IEEE ICC 2008* Panel on Cognitive Radio Wireless Networking, Beijing, China, 21 May 2008.

69. J. B. Evans, "Intelligence in the Network", Keynote speech at the *Third International Conference on Cognitive Radio Oriented Wireless Networks and Communications (CrownCom 2008)*, Singapore, May 2008.

68. J. B. Evans (lecturer), G. J. Minden, "Building Cognitive Radio Networks", invited lecture for Virginia Tech / Trinity College Dublin Software Defined Radio Course, Lawrence, Kansas (video teleconference lecture to Blacksburg, Virginia and Dublin, Ireland), 12 March 2008.

67. G. J. Minden (presenter), J. B. Evans, "Building Cognitive Radio Networks", US/DoD - Finland/Tekes Collaborative Workshop, Washington, DC, 11 March 2008.

66. J. B. Evans, "Intelligence in the Network", Keynote speech at *2nd IEEE Workshop on Cognitive Radio Networks* at *IEEE CCNC 2008*, 12 January 2008.

65. J. B. Evans, "Spectrum Management Technology - Immediate and Long-Term Challenges", *IEEE Globecom 2007* Panel on Moving Spectrum Management Forward: Technical and Regulatory Challenges, Washington, DC, 27 November 2007.

64. J. B. Evans, "Kansas Cyberinfrastructure," *EPSCoR Cyberinfrastructure Assessment Workshop*, Lexington, Kentucky, 15 October 2007.

63. J. B. Evans, "Feasibility of Use of White Spaces in Television Bands", Presentation for FCC Commissioner Michael Copps, Lawrence, Kansas, 29 August 2007.

62. J. B. Evans, "SensorNet and the Future", ITKC and Lawrence Technology Association seminar, Lawrence, Kansas, 14 June 2007.

61. J. B. Evans, "Overview of GENI & Future Internet in the US", *NSF US/Scandinavian Workshop on Mobile Wireless Systems and their Impact on the Future Internet*, Aske kursgård, Sweden, 24 May 2007.

60. J. B. Evans, "Overview of NSF Programs and International Collaboration Opportunities", *NSF US/Scandinavian Workshop on Mobile Wireless Systems and their Impact on the Future Internet*, Aske kursgård, Sweden, 24 May 2007.

59. J. B. Evans, "Overview of GENI & Future Internet in the US", *NSF US/Scandinavian Workshop on Mobile Wireless Systems and their Impact on the Future Internet*, Helsinki, Finland, 22 May 2007.

58. J. B. Evans and R. LaGarde, "Senator Roberts' IT Task Force Report", Senator Pat Roberts' Advisory Committee on Science, Technology and the Future (ACSTF) Meeting, 20 February 2007.

57. J. B. Evans, "TV Band Measurements and Implications for White Space Use," *Defense Spectrum Summit 2006* Panel on Future Technologies for Spectrum, Annapolis, Maryland, December 2006.

56. J. B. Evans, "Security & Privacy in Dynamic Wireless Networks", EU-US Summit Series on Cyber Trust Workshop on System Dependability & Security, Dublin, Ireland, 15-16 November 2006.

55. J. B. Evans, Breakout session reports, LSN Workshop on Future Internet and Experimentation Facility Design (with GENI as an Example Proposed Initiative), Arlington, Virginia, July 24-25, 2006.

54. J. B. Evans, "GENI Wireless Working Group", National Science Foundation's Town Hall Meeting on GENI - Global Environment for Networking Innovations, Chicago, Illinois, May 5-6, 2006

53. J. B. Evans, "Intelligence in the Network," *University of Kansas Distinguished Professor Inaugural Lecture*, Lawrence, Kansas, April 2006.

52. J. B. Evans, "Wireless/Sensor Breakout", National Science Foundation's Town Hall Meeting on GENI - Global Environment for Networking Innovations, Arlington, Virginia, March 10, 2006

51. J. B. Evans, "Possible Global Environment for Network Innovations (GENI) Initiatives," *Workshop on Networking for Advanced Cyberinfrastructure in EPSCoR States*, Lawrence, Kansas, February 2006.

50. J. B. Evans, "GENI: Global Environment for Networking Investigations," *Workshop on Networking for Advanced Cyberinfrastructure in EPSCoR States*, Lawrence, Kansas, February 2006.

49. J. B. Evans, "NSF & Cognitive Networks," *Int. Conf. on Comp. Comm. and Networks (ICCCN 2005)* Panel on The Next Big Bang in Wireless and Mobile Communication, San Jose, California, October 2005.

48. J. B. Evans, "NSF and DHS DETER/EMIST Laboratory Experimenter's Workshop - Welcoming Remarks," *NSF Cyber Trust PI Meeting*, Newport Beach, California, October 2005.

47. J. B. Evans, "NSF & Cognitive Networks," *IEEE SECON* Panel on Cognitive Networks, Santa Clara, California, September 2005.

46. J. B. Evans, "NSF Wireless Networking Research," *NSF Gigabit Wireless Networking Workshop*, September 2005.

45. J. B. Evans, "Thoughts on Research Competitiveness," Utah State University School of Engineering Retreat, Logan, Utah, August 2005.

44. J. B. Evans, "Global Environment for Network Innovations," *NSF Wireless and Mobile Planning Group Workshop*, Rutgers, New Jersey, August 2005.

43. J. B. Evans, "NSF Spectrum-Related Research," *NSF/FCC Workshop on the Future of Spectrum*: Technologies and Policies, Arlington, Virginia, May 2005.

42. J. B. Evans, "NSF Response," *Conference on Economics, Technology, and Policy of Unlicensed Spectrum*, East Lansing, Michigan, May 2005.

41. J. B. Evans, "NSF Wireless Networking Research," *Nebraska EPSCoR Conference*, Omaha, Nebraska, April 2005.

40. J. B. Evans, "NSF Perspective on P2P for MANETs," *Workshop on Peer-to-Peer Mobile Ad Hoc Networks - New Research Issues*, Wadern-Dagstuhl, Germany, April 2005.

39. J. B. Evans, "NSF Spectrum-Related Research," *IEEE Wireless Communications & Networking Conference (WCNC) 2005*, New Orleans, Louisiana, March 2005.

38. J. B. Evans, "The NeTS Program," *INFOCOM 2005*, Miami, Florida, March 2005.

37. J. B. Evans, "The NeTS Program," *EPSCoR Large-Scale NSF CISE Workshop*, Alexandria, Virginia, November 2004.

36. J. B. Evans, "The Cyber Trust Program," *DETER Laboratory Experimenter's Workshop*, Washington, DC, October 2004.

35. J. B. Evans, "Broadband Wireless Panel Q&A," *BroadNets 2004*, San Jose, California, October 2004.

34. J. B. Evans, "The NeTS Program," *MASS 2004*, Ft. Lauderdale, Florida, October 2004.

33. J. B. Evans, "Wireless Networking at NSF," for the Funding Wireless: Dollars and Hertz Panel, *WNCG 2004*, Austin, Texas, October 2004.

32. J. B. Evans, "The NeTS Program," *NSF Wireless Networking PI Meeting*, Nashua, New Hampshire, October 2004.

31. J. B. Evans, "The NeTS & Cyber Trust Programs & Wireless Networking Research at NSF," *Wireless Internet Center for Advanced Technology (WICAT) Meeting*, Brooklyn, New York, October 2004.

30. J. B. Evans, "VANET Workshop Thoughts," *Vehicular Ad Hoc Networking Workshop, ACM MobiCom 2004*, Philadelphia, Pennsylvania, October 2004.

29. J. B. Evans, "Resilient Wireless Communication Networks," *IEEE Wireless Communications and Networking Conference*, Atlanta, Georgia, March 2004.

28. J. B. Evans, "NSF NeTS Program and Activities," *Conf. on Information Sciences and Systems*, Princeton, New Jersey, March 2004.

27. J. B. Evans, "The NeTS Program," *NSF Wireless Networking PI Meeting*, Charleston, South Carolina, January 2004.

26. J. B. Evans, "New Directions in Wireless Networking Research," *NSF Workshop on Wireless Communications*, Honolulu, Hawaii, October 2003.

25. J. B. Evans, G. J. Minden, "Innovative Active Networking Services," *DARPA Active Networks PI Meeting*, Atlanta, Georgia, December 2000.

24. J. B. Evans, "Broadband Local Access," *Third Intl. Symp. on Advanced Radio Tech.*, Boulder, Colorado, September 2000.

23. J. B. Evans, "Measurements in Gigabit Networks," *NASA Gigabit Networking Workshop*, Mountain View, California, August 2000.

22. J. B. Evans, "Rapidly Deployable Radio Network - Phase II", *DARPA Global Mobile Information Systems (GloMo) PI Meeting*, Eatontown, New Jersey, July 2000.

21. J. B. Evans, "Rapidly Deployable Radio Networks," University of Oklahoma, Norman, Oklahoma, November 1999.

20. J. B. Evans, G. J. Minden, "Innovative Active Networking Services," *DARPA Active Networks PI Meeting*, Albuquerque, New Mexico, November 1999.

19. J. B. Evans, "ENABLE," *DOE Next Generation Internet Retreat*, Washington, DC, October 1999.

18. J. B. Evans, "Emerging Local Loop Technologies and Services," Kansas Telecommunication Industry Seminar, Lawrence, Kansas, May 1999.

17. J. B. Evans, "Rapidly Deployable Radio Network - Phase II", *DARPA Global Mobile Information Systems (GloMo) PI Meeting*, Richardson, Texas, February 1999.

16. J. B. Evans, V. S. Frost, G. J. Minden, A. Kulkarni, I. Deendar, "Active Networks and Wireless Adaptation", *Cross-Industry Workshop on End-to-End Wireless Integration*, Menlo Park, California, August 1998.

15. J. B. Evans, "Rapidly Deployable Radio Network - Phase II", *DARPA Global Mobile Information Systems (GloMo) PI Meeting*, Arlington, Virginia, July 1998.

14. J. B. Evans, "Wireless ATM Solutions," *ATM Year 98*, San Francisco, California, June 1998.

13. J. B. Evans, "Service Independent Access Points (SIAP) to Optical Wide Area Networks", *Second Annual Sprint Applied Research parTners Advanced Networking (SPARTAN) Symposium*, Lawrence, Kansas, May 1998.

12. R. Jonkman, J. B. Evans, V. S. Frost, "NetSpec and Network Performance", *Defense Research & Engineering Network Users Conf.*, Stennis Space Center, Mississippi, November 1997.

11. S. Murthy, J. Evans, D. Niehaus, "ATM Forum Extensions to GSMP*", OpenSig Fall '97 Workshop*, Columbia University, New York, October 1997.

10. J. B. Evans, "Rapidly Deployable Radio Network - Phase II", *DARPA Global Mobile Information Systems (GloMo) PI Meeting*, Long Branch, New Jersey, July 1997.

9. J. B. Evans, "Experiences in Wide Area Networking: the MAGIC & AAI Testbeds", *University of Cambridge Computer Laboratory Seminar Series*, Cambridge, England, March 1997.

8. J. B. Evans, "Wireless ATM," *Advanced Communication Networks '97*, Tel Aviv, Israel, February 1997.

7. J. B. Evans, "WAN Performance Studies in the MAGIC and AAI Testbeds", *Measure Workshop*, Cambridge, England, February 1997.

6. J. B. Evans, V. S. Frost, D. Niehaus, R. Jonkman, L. Dasilva, B. Lee, G. Lazarou , "AAI ATM WAN Performance: Tools, Experiments, and Results", *1996 DARPA ATM WAN Performance Workshop*, June 1996.

5. J. B. Evans, "Benchmarking of High Performance Networks," *1995 Int. Conf. Comp. Comm. & Networks*, Las Vegas, Nevada, September 1995.

4. J. B. Evans, G. J. Minden, V. S. Frost, D. W. Petr, D. Niehaus, D. Braun, B. Buchanan, B. Ewy, C. N. Gupta, S. Seetharam, V. Sirkay, M. Swink, H. Uriona, E. Yousefi, "Experiences with a 622 Mb/s ATM/SONET Gateway", *1995 MAGIC Symposium*, Minneapolis, Minnesota, July 1995.

3. J. B. Evans, B. J. Ewy, V. S. Frost, G. J. Minden, "TCP and ATM Measurements in the MAGIC Testbed", *1994 MAGIC Symposium*, Lawrence, Kansas, August 1994.

2. J. B. Evans, "The MAGIC Gigabit Network", *2nd Midwest Electro-Technology Conference*, Iowa State University, Ames, Iowa, April 1993.

1. J. B. Evans, "The MAGIC Gigabit Network", *Sunflower Seminar Series*, Wichita State University, Wichita, Kansas, January 1993.

SHORT COURSES AND OTHER PRESENTATIONS

7. J. B. Evans (presenter), "GENI – FIRE Workshop Breakout Sessions", *NSF/GENI FIRE/EU Workshop,* Brussels, Belgium, 30 September – 1 October 2010.

6. J. B. Evans (presenter), P. Crowley, P. O'Neil, "GENI Substrate Working Group – Agenda and Deliverables", *NSF GENI Engineering Conference 3*, Palo Alto, California, 29 October 2008.

5. J. B. Evans (presenter), K. Rauschenbach, P. Crowley, "GENI Substrate Working Group – Agenda and Deliverables", *NSF GENI Engineering Conference 2*, Arlington, Virginia, 4 March 2008.

4. G. J. Minden, J. B. Evans, "Building Software Defined Radios", a short course at *IEEE Wireless Communications and Networking Conference (WCNC) 2006*, Las Vegas, Nevada, April 2006.

3. J. B. Evans, "Internet Technologies", a short course for US Naval Reserve, Kansas City, April 2003.

2. S. P. Gogineni, J. B. Evans, et al, "High Frequency Printed Circuit Board Design", a short course for Allied Signal Corporation, Kansas City, November 1992.

1. J. B. Evans, "FDDI: The Fiber Distributed Data Interface", *IEEE Professional Development Workshop on High Speed Networking*, Kansas City, June 1992.

NON-REFEREED ARTICLES AND OTHER WORKS

9. New America Foundation, Media Access Project, CUWIN Foundation, M. J. Marcus, P. Kolodzy, J. B. Evans, "Reply Comments to FCC OET in Matter of Unlicensed Operations in the TV Broadcast Bands (ET Docket No. 04-186) and Additional Spectrum for Unlicensed Devices Below 900 MHz and In the 3 GHz Band (ET Docket No. 02-380)", September 4, 2007.

8. New America Foundation, Media Access Project, CUWIN Foundation, M. J. Marcus, P. Kolodzy, J. B. Evans, "Reply Comments to FCC OET in Matter of Unlicensed Operations in the TV Broadcast Bands (ET Docket No. 04-186) and Additional Spectrum for Unlicensed Devices Below 900 MHz and In the 3 GHz Band (ET Docket No. 02-380)", August 15, 2007.

7. D. DePardo, J. B. Evans, J. A. Roberts, V. R. Petty, A. M. Wyglinski, P. Kolodzy, M. J. Marcus, "Quantifying the Impact of Unlicensed Devices on Digital TV Receivers", New America Foundation (http://www.newamerica.net/), January 2007. Also published as University of Kansas Technical Report ITTC-FY2007- 44910-01.

6. P. Kolodzy, M. J. Marcus, J. Evans, New America Foundation, Media Access Project, "Comments to FCC (ET Docket 04-186) - DTV Receiver Desensitization Interference Study: Preliminary Results", December 5, 2006.

5. L. Peterson (ed.), T. Anderson, D. Blumenthal, D. Casey, D. Clark, D. Estrin, J. Evans, D. Raychaudhuri, M. Reiter, J. Rexford, S. Shenker, J. Wroclawski, "GENI Design Principles", *GENI Design Document 06-08, GENI Planning Group*, March 2006 (updated August 2006). Also published, in part, as "GENI Design Principles", *IEEE Computer*, v39, n9, pp. 102-105, September 2006.

4. J. Evans, G. Minden, E. Knightly, "Cognitive Radio Networks in GENI", *GENI Design Document 06-20*, *Wireless Working Group*, September 2006.

3. J. Evans, D. Raychaudhuri, S. Paul, "Overview of Wireless, Mobile and Sensor Networks in GENI", *GENI Design Document 06-14, Wireless Working Group*, September 2006.

2. V. S. Frost, J. B. Evans, "Breadth and Experience in Education for Next Generation Networks", *ACM SIGCOMM Workshop on Computer Networking: Curriculum Designs and Educational Challenges*, Pittsburgh, Pennsylvania, August 20, 2002.

1. B. J. Ewy, J. B. Evans, "Secondary Cache Performance in RISC Architectures", *ACM Comp. Arch. News*, June 1993.

TECHNICAL REPORTS AND OTHER MINOR WORKS

Over thirty technical reports and similar works.

SERVICE ACTIVITIES - NATIONAL & INTERNATIONAL

Memberships: Tau Beta Pi, Eta Kappa Nu, IEEE, ACM, ASEE
Council Member, *Computing Community Consortium (CCC),* 2012-2015
Board of Governors Member-at-Large, *IEEE Communications Society*, 2009-2011
Co-Chair, Substrate Working Group, *Global Environment for Network Innovations (GENI)*, 2007-2009
Planning Group Member and Wireless Working Group Co-Chair, *Global Environment for Network Innovations (GENI)*, 2006-2007
Editor, *Radio Communications Series of IEEE Communications Magazine*, 2006-2013
Editorial Board Member, *International Journal of Security and Networks (IJSN)*, 2005-present
Associate Editor, *IEEE Communications Letters*, 1999 – 2004
Guest Editor, *IEEE Journal on Selected Areas in Communications* Special Issue on Adaptive, Spectrum Agile and Cognitive Wireless Networks, 2005-2007
Technical Sub-Committee on Cognitive Networks, Vice-Chair (2006-2010), *IEEE Communications Society*
Technical Committee on High-Speed Networking (was Gigabit Networking), Steering Committee (2006-2013), Chair (2001-2006), Vice-Chair (1999-2001), Secretary (1996-1999), Member (1995-1996), *IEEE Communications Society*
Technical Activities Committee, Secretary (2001-2003), *IEEE Communications Society*
Co-Founder, Executive Committee Member, Technical Program Committee Member, *IEEE Symposium on Dynamic Spectrum Access Networks (DySPAN) 2005*, Baltimore, Maryland
Executive / Steering Committee Member, Technical Program Committee Member, *IEEE Symposium on Dynamic Spectrum Access Networks (DySPAN) 2007*, Dublin, Ireland
General Chair, Executive / Steering Committee Member, *IEEE Symposium on Dynamic Spectrum Access Networks (DySPAN) 2008*, Chicago, Illinois
Executive / Steering Committee Member, *IEEE Symposium on Dynamic Spectrum Access Networks (DySPAN) 2010*, Singapore
Technical Program Committee Member, *IEEE Symposium on Dynamic Spectrum Access Networks (DySPAN) 2011*, Aachen, Germany
Organizing Committee, Technical Program Committee Member, *IEEE CogNet 2009 Workshop*, Dresden, Germany
Vice General Chair, Technical Program Committee Member, *IEEE CogNet 2008 Workshop*, Beijing, China
Co-Chair, *IEEE High Speed Networking Symposium 2004*, Paris, France
Co-Chair, Program Committee, *IEEE Gigabit Networking Workshop 2001*, Anchorage, Alaska
Chair, Program Committee, *IEEE Gigabit Networking Workshop 2000*, Tel Aviv, Israel
Co-Chair, Program Committee, *IEEE Gigabit Networking Workshop '99*, New York, New York
Co-Organizer, *NSF/FCC Workshop on the Future of Spectrum: Technologies & Policies*, 2005, Arlington, Virginia
Co-Organizer, *US (NSF) - Finland (TEKES) Workshop on Wireless Networks*, 2011, Washington, DC

Technical Committee for DSP, Member (1993-2005), *IEEE Circuits and Systems Society*
International Vice Co-Chair and Technical Program Committee Member, *IEEE INFOCOM 2005*
Honorary Conference Chair, *Int. Workshop on Research Challenges in Security & Privacy for Mobile & Wireless Networks (WSPWN '06)*
Member of Organizing Group, *DARPA/NSF 2006 Workshop on Real-Time Knowledge Processing for Wireless Network Communications*, Stanford University, California, March 2006
Technical Program Committee Member, *IEEE CogNet 2007 Workshop*, Glasgow, Scotland
Technical Program Committee Member, *Int. Conf. on Cognitive Radio Oriented Wireless Networks & Communications (CrownCom)*, 2006-2008
Technical Program Committee Member, *Workshop on Secure Network Protocols (NPSec)*, 2005-2007
Workshop Advisory Board and Technical Program Committee Member, *IEEE Workshop on Networking Technologies for Software Defined Radio (SDR) Networks*, 2006-2009
Steering Committee, Technical Program Committee Member, *ACM International Workshop on Wireless Network Testbeds, Experimental evaluation and CHaracterization (WiNTECH)*, 2006-2013
Technical Program Committee Member, *IEEE Workshop on Cognitive Radio Networks (at IEEE CCNC)*, 2007-2008
Member of Technical Program Committee, *ACM International Workshop on Mobility in the Evolving Internet Architecture (MobiArch)*, 2006-2008
Member of Technical Program Committee, *1st IEEE International Workshop on Cognitive Radio and Advanced Spectrum Management (CogART 2008)*
Technical Program Committee Member, *1st Int. Workshop on Technology and Policy for Accessing Spectrum (TAPAS 2006)*
Technical Program Committee Member and Session Chair, *IEEE Globecom 2004*
Technical Program Committee Member, *IEEE Globecom 2007*
Technical Program Committee Member, *IEEE High Speed Networking Workshop 2002, 2003, 2006-2007*
Technical Program Committee Member, *IEEE Intl. Conf. on Communications (ICC) 2001, 2008-2009*
Technical Program Committee Member, *IEEE ISCAS 2000*
Technical Program Committee Member, *IEEE Gigabit Networking Workshop '96, '97, '98*
Technical Program Committee Member and Session Chair, *OpenSig Spring '97 Workshop*
Technical Program Committee Member, *IEEE INFOCOM '95*
Technical Program Committee Member and Session Chair (1993-1994), *Intl. Conf. Signal Proc. Appl. & Tech.*
Panelist, *NTIA/NSF Wireless Spectrum Research & Development Senior Steering Group (WSRD-SSG) Workshop*, July 2011
External Program Reviewer, *Florida International University*, Miami, Florida, 2010
External Ph.D. Reviewer, *Trinity College*, Dublin, Ireland, 2008
Reviewer, *Smithsonian Institution,* 2008
Reviewer, *IEEE Radio and Wireless Symposium,* 2008
Reviewer, *IEEE Vehicular Technology Conference,* 2006 (Spring)
Reviewer, *IEEE Trans. on Dependable & Secure Computing*, 2005
Reviewer, *IEEE Trans. on Signal Processing* (formerly *Acoust., Speech, Signal Proc.*), 1989-1999
Reviewer, *IEEE Trans. on Circuits & Systems*, 1990-1995, 1999
Reviewer, *IEE Visual, Image, & Signal Processing*, 1994-1995
Reviewer, *IEE Circuits, Devices, & Systems*, 1996-1997
Reviewer, *IEE Electronics Letters*, 1994-1997, 1999
Reviewer, *IEEE Communications Letters*, 1997-1998
Reviewer, *IEEE Signal Processing Letters*, 1994, 1996, 1999
Reviewer, *IEEE Journal on Selected Areas in Communications*, 1994, 1996, 1998, 2005
Reviewer, *ACM Trans. on Modeling & Computer Simulation*, 1996
Reviewer, *ACM Performance Evaluation Review*, 1999
Reviewer, *Performance Evaluation*, 1993-1994
Reviewer, *IEEE Personal Communications Magazine*, 1997
Reviewer, *IEEE Signal Processing Magazine*, 1996
Reviewer, *IEEE Communications Magazine*, 1993
Reviewer, *IEEE Trans. on Education*, 1999
Reviewer, *IEEE Intl. Conf. on Communications*, 1991-1993
Reviewer, *IEEE Globecom*, 1992, 2001, 2009
Reviewer, *IEEE INFOCOM*, 1992-1994
Reviewer, *IEEE Distributed Computing Symposium*, 1993
Reviewer, *IEEE Workshop on IP Operations and Management*, 2003
Reviewer, *International Conference on Computer Communications and Networks*, 2003
Reviewer, *IEEE Symposium on High Performance Distributed Computing*, 1993
Reviewer, West Educational Publishing, 1991-1992
Reviewer, National Science Foundation, 1992, 1996, 1999-2003, 2006-2013
Reviewer, Science Foundation Ireland, 2007
Co-Chair, Senator Roberts' IT Task Force, Senator Pat Roberts' Advisory Committee on Science, Technology and the Future (ACSTF), 2007-2010

Member, Army Basic Research Review Panel on Mathematics, Modeling, Communications, Networks & Information Sciences, 2007, 2010
Member, Industry Council (nee Board of Directors), Software and Information Technology Association of Kansas (SITAKS), 2008-2010
Consultant, Defense Advanced Research Projects Agency (DARPA), 2006-2011
Consultant, US Army FBCB2/JBCP, 2011-2014
Consultant, General Dynamics C4S, 2010-2014
Owner, Ascendant Networks, LLC, Lawrence, Kansas, 2010-present
Chief Scientist and Partner, Ascend Intelligence, LLC, Arlington, Virginia, 2008-2010
Partner, TGSYNC, LLC, Maryland, 2010-2014
Consultant, Honeywell Corporation, Olathe, Kansas, 2000
Consultant, Sprint Corporation, Overland Park, Kansas, 1999
Technical Advisor, Sprint Corporation, Overland Park, Kansas, 1992-1998
Consultant, Olivetti & Oracle Research Laboratory, Cambridge, England, 1996-1997
Consultant, Digital Equipment Corporation, Systems Research Center, Palo Alto, California, 1994-1995
Consultant, US Army TRADOC, Ft. Leavenworth, Kansas, 1994-1996
Member, Technical Activity Board, Control Plane Technologies, Inc., Milpitas, California, 1998
Member, Board of Directors, Secretary, and Chief Scientist, NetGames USA, Inc., Overland Park, Kansas, 1998-2000
Treasurer, Causal Technologies, Inc., Olathe, Kansas, 1998

SERVICES ACTIVITIES - DEPARTMENT/SCHOOL/UNIVERSITY

KU EECS Equipment Committee, 1998-2000, 2002-2003, chairman 2000-2001
KU EECS Network Operations Committee, chairman 1994-1999, 2001-2003, 2011-2013
KU EECS Ph.D. Qualifier Committee, 1995-1998
KU EECS ABET Certification (Ad Hoc) Committee, 1993-1995
KU EECS Graduate Admissions Review Committee, 1991-1993
KU EECS New Faculty Search (Ad Hoc) Committee, 1991-1994, 2007-2008, 2012-2015
KU EECS Graduate Program Review (Ad Hoc) Committee, 1991-1993
KU EECS Engineering Expo (Ad Hoc) Committee, 1991
KU EECS Computing Equipment Upgrade (Ad Hoc) Committee, 1990-1991
KU School of Engineering Promotion & Tenure Committee, 2014-2015
KU School of Engineering Computing Services, Director 2012-2013
KU School of Engineering Computer Committee, 1991-1995,2013-2015, chairman 1992-1994
KU University Task Force on Research Computing, chairman 2006-2008
KU University Academic Computing & Telecommunications Committee, chairman 2005-2008
KU University Classified Research Task Force, 2005-2006
KU University Faculty Senate Research Committee, Subcommittee on Research Computing, 2005-2006
KU University Parking Commission, 2001-2002
KU University Parking Board, 1999-2001
KU University Events Committee, 1998-1999

GRANTS

"GENI-FIRE Workshop", National Science Foundation, Principal Investigator, $80,000, September 2010 - August 2015.

"Collaborative Research: GENI Working Group Meetings - Substrate", National Science Foundation, Principal Investigator, $50,000, July 2009 - December 2014.

"MRI: Acquisition of an Advanced Computational Infrastructure for Modeling Biological Systems", National Science Foundation, Principal Investigator, $429,374 with match, June 2008 - July 2012.

"Collaborative Research: NeTS-FIND: CogNet - An Experimental Protocol Stack for Cognitive Radio Networks and Its Interaction with the Future Internet", National Science Foundation, Principal Investigator, $349,000, September 2006 - August 2012.

"Workshop on Mobile Wireless Technology and the Impacts on Future Internet", National Science Foundation, Principal Investigator, $72,155, September 2006 - September 2011.

"GpENI: Great Plains Environment for Network Innovation", National Science Foundation via the GENI Project Office at BBN, Co-Investigator, $462,000, October 2008 - May 2012.

"KU Bioinformatics Computing Facility Core Renovation and Improvement", National Institutes of Health, Co-Investigator (when KU VP for Research became Principal Investigator), $6,850,000, July 2010 - June 2012.

"SensorNet - Rail Sensor Testbed - Active Agents in Containers for Transport Chain Security", Office of Naval Research, Principal Investigator, $1,217,000, June 2007 - December 2010.

"A Framework for Re-targeting Radio Designs", Defense Advanced Research Projects Agency, Co-Principal Investigator, $184,000, August 2007 - August 2008.

"Extensible Affordable Software Defined Radio with Cross-Band Cross-Protocol Capability", Acadia Optronics, Principal Investigator, $21,000, June 2008 - April 2009.

"Quantifying the Impact of Unlicensed Devices on Digital TV Receivers", New America Foundation, Principal Investigator, $32,000, September 2006 - April 2008.

"SensorNet – Advanced SensorNet Technologies to Monitor Trusted Corridors" and "SensorNet – A Unified Architecture for SensorNet with Multiple Owners", Oak Ridge National Laboratory, Co- Investigator, $2,472,326, August 2005 – June 2009.

"Adaptive Dynamic Radio Open-source Intelligent Team (ADROIT)", Defense Advanced Research Projects Agency, Co-Principal Investigator, $881,234, December 2005 – December 2008.

"The Future of Spectrum: Technologies and Policies Workshop", National Science Foundation, Co-Principal Investigator, $78,637, May 2003 – August 2006.

"Flexible Wireless Systems for Rapid Network Evolution", National Science Foundation, Principal Investigator, $832,500, January 2003 – December 2005.

"Protocol, Profile, and Interoperability Testing of Bluetooth Devices", Bluetooth Special Interest Group, Principal Investigator, $33,067, December 2002 – March 2003.

"Ambient Computational Environment", Sprint, Principal Investigator, $360,000, July 2000 – July 2001.

"Architecture and Prototype for an Ambient Computational Environment", Defense Advanced Research Projects Agency, Co-Principal Investigator, $1,460,000, July 2000 - December 2002.

"Architectures for Space Based Internets", NASA, Co-Investigator, $362,311, September 2000 - August 2002.

"Innovative Active Networking Services", Defense Advanced Research Projects Agency, Co-Principal Investigator, $1,382,750, June 1999 - June 2002.

"Network Monitoring for Performance Analysis and for Enabling Network-Aware Applications", Department of Energy, Principal Investigator, $502,797, July 1999 - July 2002.

"Open Control Architectures", Sprint, Principal Investigator, $204,500, July 1999 - July 2000.

"Wireless Network Systems Research", Adaptive Broadband, Ltd., Principal Investigator, $150,000, October 1998 - October 2000.

"Quality of Service Translations", Sprint, Principal Investigator, $1,000,700, June 1998 - June 2000.

"Broadband Wireless Local Loop", Sprint, Principal Investigator, $431,800, June 1998 - June 2000.

"AAL2 Call/Connection Control Signaling", Sprint, Principal Investigator, $234,900, June 1998 - June 2000.

"A Wireless Networking Laboratory with High Frequency (3-20 GHz) Capabilities", Sprint, Principal Investigator, $55,100, June 1998 - June 1999.

"Broadband Wireless Local Loop", Kansas Technology Enterprise Corp., Principal Investigator, $69,000, January 1998 - June 1999.

"Exploiting Open Control of ATM Switches", Sprint, Principal Investigator, $250,000, September 1997 - March 1999.

"Rapidly Deployable Radio Network (RDRN): Phase II", Defense Advanced Research Projects Agency, Principal Investigator, $1,499,074, June 1997 - December 1999.

"A Functional Programming Environment for Design and Implementation of High Performance Radio and Synthetic Aperture Radar Processing Functions", Defense Advanced Research Projects Agency, Co-Principal Investigator, $1,569,940, June 1997 - June 2000.

"MAGIC-II: A Large Scale Internetwork Supporting High Speed Distributed Storage, Processing and Applications", Defense Advanced Research Projects Agency, Co-Principal Investigator, $917,887, May 1996 - May 1999.

"Ambient Computational Environment", National Science Foundation, Co-Investigator, $964,912, September 1999 - August 2001.

"Enhancement of the KU PNNI Performance Evaluation Tools - TP&I", Sprint, Co-Investigator, $324,719, January 1999 - December 1999.

"Enhancement of the KU PNNI Performance Evaluation Tools - NP&D", Sprint, Co-Investigator, $94,882, January 1999 - December 1999.

"Wireless ATM Adaptive Voice/Data Networks", Rome Laboratories (US Air Force), Principal Investigator, $408,842, January 1995 - December 1998.

"Performance Tuning Study and Tools for Computer Systems Connected to the DREN", Space & Naval Warfare (SPAWAR) Systems Command, Principal Investigator, $24,155, December 1997 - June 1998.

"A Wireless Extension to the ACTS ATM Internetwork", Sprint, Principal Investigator, $522,343, January 1995 – December 1998.

"ATM Available Bit Rate Service Simulation Models", Integrated Telecom Technology (IgT), Principal Investigator, $35,000, January 1996 - December 1996.

"Performance Evaluation of IP Firewalls over ATM Networks", Trusted Information Systems, Principal Investigator, $9,300, December 1996 - January 1997.

"Investigation of FPGA Rapid Prototyping of Military Software Radio Systems", Air Force Research Laboratory, Co-Principal Investigator, $175,000, April 1998 - April 2001.

"Determination of the Impact of Advanced Traffic Controls on the Performance of Edge/Core ATM Network Architectures", Sprint, Co-Principal Investigator, $893,600, January 1997 - December 1998.

"Advanced ATM Research", NEC America, Co-Investigator, $100,000, January 1997 - December 1997.

"Establishment of a Lightwave Laboratory for Applications Focused Research", National Science Foundation and KTEC, Co-Investigator, $1,056,120, August 1996 - July 1998.

"Lightwave Communications Research", Sprint, Co-Investigator, $2,684,838, January 1996 - December 1998.

"Digital Signal Processing (DSP) Rapid Prototyping of Advanced Tactical Communication Systems with Field Programmable Gate Arrays (FPGA)", Rome Laboratories (US Air Force), Co-Investigator, $196,494, June 1995 – December 1997.

"Collection and Application of ATM Network Performance Characteristics", Sprint, Co-Investigator, $274,930, June 1995 - December 1997.

"Development of a Large-scale ATM Network Simulation Environment (LANSE)", Sprint, Co-Investigator, $122,111, April 1995 - October 1996.

"ATM Reference Traffic System", Sprint, Co-Investigator, $200,000, May 1995 - May 1996.

"Development and Testing of Advanced Signaling Protocols for ATM Networks", Sprint, Co-Investigator, $149,973, October 1994 - August 1996.

"Rapidly Deployable Radio Network", DARPA, Co-Investigator, $1,442,044, June 1994 - June 1997.

"ACTS ATM Internetwork", DARPA through Sprint, Co-Investigator, $658,692, July 1994 - July 1999.

"DesignLab", National Science Foundation and KTEC, Co-Investigator, $1,289,818, 1994 - 1998.

"KEURP-Net", KEURP, Co-Investigator, $25,000, January 1994 - December 1994.

"Adaptive Voice/Data Networks", Rome Laboratories (US Air Force), Principal Investigator, $88,500, June 1993 – May 1994.

"Voice Transport via ATM Networks", Sprint, Co-Investigator, $102,900, September 1993 - September 1994.

"Research on Real Time Estimation of Traffic Descriptors for High Speed Telecommunications Networks", Bell Northern Research, Co-Investigator, $23,700, June 1993 - December 1993.

"The Design and Evaluation of Wide-Area Network Navigators for Education", Great Lakes St. Lawrence Seaway Telecommunications Collaborative, Co-Investigator, $150,300, June 1993 - October 1993.

"Research on Gigabit Gateways: Access to Future Public Switched Networks", Co-Investigator, Digital Equipment Corporation, $74,400 in equipment, July 1993.

"The Silicon Beaker Project", Kansas Technology Enterprise Corp., Principal Investigator, $28,771, October 1993 - October 1994.

"DSP on FPGAs", Kansas Technology Enterprise Corp., Principal Investigator, $19,241, May 1993 - May 1994.

"Research on Gigabit Gateways: Access to Future Public Switched Networks", Co-Investigator, ARPA, Sprint, DEC, and KTEC, $565,000 ($1.6 million total in grants and support), July 1992 - June 1995.

"An Advanced Telecommunications Network Signaling Model", Co-Principal Investigator, TRW, $25,000, August 1992 - June 1993.

"Novel Digital Speech Compression Techniques", Air Force Office of Scientific Research Initiation Grant, Principal Investigator, $20,000, January - December 1992

"Analysis and Simulation of Traffic Management Algorithms for Frame Relay/Fast Packet Networks", Co-Investigator, Sprint International and KTEC, $36,335, January - December 1991.

National Science Foundation MOSIS Educational Use Grant, Principal Investigator, approx. $10,000 per year, 1990-1994.

University of Kansas General Research Fund Award, Principal Investigator, $6,426, July 1992 - June 1993.

University of Kansas New Faculty Research Fund Award, Principal Investigator, $5,000, July 1990 - June 1991.

AWARDS/FELLOWSHIPS

IEEE Senior Member, 2001-present
Deane E. Ackers Distinguished Professor, University of Kansas, 2005-present
University of Kansas School of Engineering Miller Scholar Award, 2013
Charles E. Spahr Professorship, University of Kansas, 1999-2004
University of Kansas Miller Award for Research, 1996
AT&T Bell Laboratories Ph.D. Scholarship, 1984-1988
Garden State Graduate Fellowship, 1983-1987
Lafayette College Finley W. & Ethelwyne H. Smith Electronic Engineering Honors Award, 1983

OTHER QUALIFICATIONS

Operational experience with Cisco IP routers using BGP, OSPF, RIP, VoIP, etc., with various firewall and gateway implementations, a wide variety of Ethernet and ATM switches, and many wireless access technologies.
Programming experience with C, C#, C++, Python, Perl, Java, JavaScript, FORTRAN, Modula-2, Modula-3, as well as Arduino, 80x86, and 680x0 embedded processor and assembly languages.
Experience with Linux/UNIX software development tools, and VLSI and PCB computer-aided design packages.
Programming and interface design experience with TI and AT&T DSP chips.
Graphical programming experience with Android platforms and X11 window system.

PERSONAL

U.S. citizen; born March 24, 1961; married, two children, one grandchild.
Pilot (commercial with instrument rating), sailor (ASA 101,103,104,105), skier, runner, guitar player.
SECRET clearance.
Web site – http://www.ittc.ku.edu/~evans/