JOSEPH B. EVANS

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UNIVERSITY OF KANSAS

Electrical Engineering & Computer Science Information & Telecommunications Technology Center 2048 Eaton Hall, Lawrence, KS 66045-7608

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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

DEFENSE ADVANCED RESEARCH PROJECTS AGENCY (DARPA) June 2015 – present, Program Manager

Arlington, Virginia

- Program manger in the Strategic Technology Office, focusing on networking technologies including maritime networks and networking of autonomous systems.
- Program manager for Mobile Hotspots, networking technology for forward-deployed forces.

UNIVERSITY OF KANSAS August 2005 – present, Deane E. Ackers Distinguished Professor Lawrence, Kansas

August 1999 – 2004, Charles E. Spahr Professor

August 2008 – May 2010, Director, ITTC August 2005 – 2008, Director of Research IT

August 1999 – 2004, Charles E. Spanr Pro August 1994 – 1999, Associate Professor August 1989 – 1994, Assistant Professor

August 1996 – 2004, Director, NDSL Oct. 1999 – Aug. 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.

GENERAL DYNAMICS C4S ASCEND INTELLIGENCE, LLC TACTICAL BLUE LABORATORIES, LLC Arlington, Virginia Arlington, Virginia 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.

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", *Ist 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", *Ist 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", *Ist 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 Multihop 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.
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- 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, ARRL

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.

FCC amateur radio license, Technician Class (KE0DIA).

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.

Security clearance information available upon request.

Web site – http://www.ittc.ku.edu/~evans/