K. SUZANNE BARBER

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EDUCATION:

Degree	School	Date
B.S. Engineering Science	Trinity University	1985
M.S. Electrical Engineering	The University of Texas at Arlington	1988
Ph.D. Electrical Engineering	The University of Texas at Arlington	1992

ACADEMIC APPOINTMENTS:

The University of Texas at Austin

AT&T Endowed Professor, Electrical and Computer Engineering Department Associate Professor, Electrical and Computer Engineering Department

Assistant Professor, Electrical and Computer Engineering Department

September 1992 – August 1997 Teaching portfolio includes: Information Security and Privacy, Identity Management and Security, Information Repositories, Introduction to Programming, Requirements Management, Software Architectures and Software Design.

Founding Director, Center for Identity

The Center for Identity serves as a research center of excellence empowering individuals and organizations to make wellinformed and intentional decisions with regard to the personal data they collect, use, share, and protect with the aim of increasing trust, convenience security and privacy. The Center is a public-private partnership bringing together the depth and breadth of knowledge and talent at The University of Texas with partners from corporations, government, and academia. Responsible for strategic vision, fund raising, fiscal oversight, recruiting, and building partnerships with faculty, corporate, and government leaders.

Founding Director, Masters Degree in Information Security and Privacy (MSISP) September 2015 – present

(formerly the MS Degree program in Identity Management and Security (MSIMS)

This M.S. degree program is offered by the School of Information at The University of Texas, ranked Top 5 in the Nation, in conjunction with the Center for Identity. The MSISP program aims to educate professionals who are responsible for information security and privacy at all levels of responsibility by offering a holistic, interdisciplinary education ensuring that professionals from multiple market sectors, roles, and levels of responsibility acquire the knowledge and skills necessary to be effective stewards of information and leaders of technological, policy, legal and societal initiatives. Responsible for strategic vision, academic curriculum, scheduling, fiscal planning, budget oversight, and student academic counseling.

Director, Software Engineering

Directed the Software Engineering academic and research programs to include faculty recruiting and mentorship, served Director of Software Engineering Research Center, and served Director of M.S. Degree Program for working professionals.

Director, The Laboratory for Intelligent Processes and Systems (UT:LIPS)

Originally established as a personal research group and now a laboratory within the Center for Identity, UT:LIPS focuses on the following research areas: 1) online trust and cyber security, 2) formal systems and software systems analysis for design methods and tools; and, 2) distributed, intelligent decision-support systems. Federal agencies, state agencies, and industrial concerns have invested in the development and application of UT:LIPS research for identity management, privacy, cybersecurity, cyber-trust, social networks, e-commerce, first responder emergency response, bio-surveillance for epidemics, UAV reconnaissance, military command and control, radar interference management, maritime domain awareness, and intelligence operations for the global war on terror. Responsible for funding acquisition, strategic research planning, research investigations, graduate student oversight, and publications.

Founding Director, Executive Program in Software Engineering

December 2002 – September 2015 September 1996 – November 1999

This program offers an advanced software engineering education with scheduling that allows working professionals to obtain a Master's Degree from the Department of Electrical and Computer Engineering. Professionals from over 200 companies have received M.S. degrees under this program since 1997. Responsible for the academic curriculum, scheduling, fiscal planning, budget oversight, and student academic counseling.

April 2004 – September 2010

September 1992 – present

September 2002 - present

September 2010 – present

September 1997 – August 2002

Chair of Board, Systems and Software Engineering Institute

The Institute provided short courses and a certificate program for software engineering techniques and practices in preparation for quality metrics and management. Courses offered at industrial sites or transmitted via distance learning facilities. Responsible for strategic planning, program management, and fiscal planning.

Automation and Robotics Research Institute (ARRI)

The University of Texas at Arlington

Faculty Associate

Proposed, supervised and conducted intelligent decision-support systems research funded by federal and industrial agencies. Represented ARRI in industrial and federal consortia and meetings. Contributed to research and standards for federallysponsored Next Generation Control Project to improve robotic and machine tool manufacturer's competitiveness.

The Robotics Institute, Carnegie-Mellon University

May 1985 – June 1986

Research Associate

Since its founding in 1979, the Robotics Institute has been leading the world in integrating robotic technologies into everyday life. Responsible for Rapidly Programmable Robotic Assembly research project that developed an interactive robotic programming language teaching robots assembly tasks through interactive instruction (i.e., human dialog) rather than manual programming.

BOARD OF DIRECTORS AND ADVISORS:

- Department of Homeland Security (DHS), Senior Advisor, February 2020- present.
- Department of Homeland Security (DHS) Data Privacy and Integrity Advisory Committee appointed by and in service to the Secretary of the Department of Homeland Security, June 2012 December 2019.
- Metroplex Technology Business Council (MTBC), Board of Directors, Fall 2008 2012.
- Center for Applied Identity Management Research (CAIMR), Board of Directors, Spring 2009 Fall 2010.
- Army Science Board.
- Defense Science Study Group, DARPA and Institute of Defense Analysis (IDA) Consultant.
- ANCA TECH, Board of Advisors. Spring 99 Fall 2004.
- ALVE L.C. Communications Software, Board of Advisors, Spring 99 Fall 2004.

OTHER PROFESSIONAL EXPERIENCE:

- **Expert Witness** Served as an expert witness for successful software-related cases in telecommunications, manufacturing, travel, and retail industries in support of law firms in Georgia, Texas, California, New York, and Washington, DC.
- Institute for Defense Analysis (IDA), Alexandria, VA. Consultant for technology reviews and advice.
- University XXI and Central Technical Support Facility (CTSF), Fort Hood, TX. Consultant for technology reviews and advice.
- Asyst Technologies, Austin, TX. Consultant to direct requirements management efforts and support system architecture development.
- U.S. Army Simulation Training and Instrumentation Command (STRICOM), Orlando, FL. Consultant to teach course regarding Systems Engineering methods and implementation strategies for web-accessible tools supporting collaborative system analysis, design, development and deployment.
- US Army CECOM, Fort Monmouth, NJ. Consultant to perform system engineering analysis and design for command and control applications, components and interfaces as part of an effort to verify and validate a comprehensive architecture. Performed consultant services to assess available enterprise tools and methodologies that will improve the system engineering approach used in the development of embedded systems.
- Applied Research Laboratory, Austin, TX. Consultant to assist in the specification of next generation systems architectures for Army training centers to include hardware, software and communications systems specifications to support Military Command and Control.
- Institute of Advanced Technology, Austin, TX. Consultant to teach courses to Senior Army Officers regarding systems engineering methods and implementation strategies.
- Tracor, (now BAE Systems), Austin, TX. Consultant to direct initial system specification and modeling effort defining Defense Logistics Systems.

September 1996 – September 1999

June 1986 – August 1992

- Automation Engineering, Dallas, TX. Consultant providing instructional courses regarding user-centered methods for acquiring, specifying and maintaining requirements driving system design, development and deployment.
- Texas Instruments, Dallas, TX. Consultant to review, evaluate and comment on products (knowledge acquisition reports, domain models and reference architecture) related to the development and deployment of military and civilian trauma care information systems.
- National Center for Manufacturing Sciences, Ann Arbor, MI. Consultant to review research, government initiatives, and commercial software systems addressing planning in manufacturing environments.
- Naval Surface Warfare Center, Dahlgren, VA. Consultant to teach courses regarding systems engineering methods and implementation strategies.

Refereed Archival Journal Publications

- 1. Zaeem, R. N., and K. S. Barber, "The Effect of the GDPR on Privacy Policies: Recent Progress and Future Promise," ACM Transactions on Management Information Systems (TMIS) Special Issue on Analytics for Cybersecurity and Privacy. (to appear December 2020)
- 2. Barber, K. S., "The Future Needs Identity Professionals," Keesing Journal of Documents & Identity p. 19, February 2020.
- 3. Huang, T., R.N. Zaeem, and K.S. Barber, "Identifying Real-World Credible Experts in the Financial Domain to Avoid Fake News," ACM Digital Threats: Research and Practice (DTRAP) Special Issue on Fake News Research. (under review)
- 4. Barber, K. S., "Privacy in the Digital Age," Keesing Journal of Documents & Identity p. 48, October 2019.
- 5. Huang, T., R.N. Zaeem, and K.S. Barber, "It Is an Equal Failing to Trust Everybody, and to Trust Nobody: Stock Price Prediction Using Trust Filters and Enhanced User Sentiment on Twitter," ACM Transactions on Internet Technology (TOIT), 19(4), 48, June 2019.
- 6. Barber, S., R. Anderson, R.N. Zaeem, and J. Zaiss, "Identity Threat Assessment and Prediction (ITAP): "Analysing identity crime to prevent identity crime," Keesing Journal of Documents & Identity, Issue 58, pp.14-19, 2019.
- 7. Zaiss, J., R.N. Zaeem, and K.S. Barber, "Identity Threat Assessment and Prediction," Journal of Consumer Affairs: Trends and Applications, 53(1), pp. 58-70, 2019.
- 8. DeAngelis, D., R. N. Zaeem, and K. S. Barber, "Finding and Motivating Trusted Expert Participation in Online Communities," invited submission to Applications of Agent Models and Architectures, IGI Global, 2018.
- 9. Nokhbeh Zaeem, R., German, R. L., and Barber, K. Suzanne, "PrivacyCheck: Automatic Summarization of Privacy Policies Using Data Mining," ACM Transactions on Internet Technology (TOIT), 18 (4), Article 53. May 2018.
- 10. Nokhbeh Zaeem, R., M. Manoharan, M., Y. Yang, and K. Suzanne Barber, "Modeling and Analysis of Identity Threat Behaviors through Text Mining of Identity Theft Stories," Journal of Computers and Security Vol. 65, pp. 50-63, 2017.
- Budalakoti, S., R. Nokhbeh Zaeem, and K.S. Barber, "Tournament Models for Authority Identification in Online Communities," International Journal of Computer and Information Technology (IJCIT) (ISSN: 2279 – 0764) 6 (2), pp. 75--83, 2017.
- 12. Nokhbeh Zaeem, R. and K. Suzanne Barber, "A Study of Web Privacy Policies Across Industries," Journal of Information Privacy and Security 13(4), pp. 169--185, Nov. 2017.
- 13. DeAngelis, D. and K.S. Barber, "Systematic Reciprocal Rewards: Motivating Expert Participation in Online Communities with a Novel Class of Incentives," *International Journal of Agent Technologies and Systems (IJATS)*, Vol. 6(2), pp. 30-50, 2014.
- 14. Golden, R. and K.S. Barber, "Supporting Identity Risk Identification and Analysis Through Text Mining of News Stories," *International Journal of Computer and Information Technology (IJCIT)*, Vol. 3(5), pp. 850-859, 2014.
- 15. DeAngelis, D. and K.S. Barber, "Incentives in Online Communities," International Journal of Computer and Information Technology (IJCIT), vol. 3(6), pp. 1229-1240, 2014
- 16. Jones, C.L.D., and K. S. Barber, "Robust Coalition Formation in a Dynamic, Contractless Environment," submitted March 2012 and under review by Journal of Autonomous Agents and Multi-Agent Systems.
- 17. DeAngelis, D. and K.S. Barber, "Systematic Reciprocal Rewards: Motivating Expert Participation in Online Communities with a Novel Class of Incentives," International Journal of Agent Technologies and Systems (IJATS), Vol. 6(2), pp. 30-50, 2014.
- 18. Golden, R. and K.S. Barber, "Supporting Identity Risk Identification and Analysis Through Text Mining of News Stories," International Journal of Computer and Information Technology (IJCIT), Vol. 3(5), pp. 850-859, 2014.

- 19. DeAngelis, D. and K.S. Barber, "Incentives in Online Communities," International Journal of Computer and Information Technology (IJCIT), vol. 3(6), pp. 1229-1240, 2014.
- 20. Han, D. and K. S. Barber. "Simulating UAV Surveillance for Analyzing Impact of Commitments in Multi-Agent Systems," International Journal of Agent Technologies and Systems, Vol. 4, Issue 1, pp. 1-16, 2012.
- 21. Kadaba, R., S. Budalakoti, D. DeAngelis, and K. S. Barber. "Modeling Virtual Footprints," International Journal of Agent Technologies and Systems, IGI Publishers, Volume 3, Issue 2, pp. 1-17, 2011.
- 22. Kadaba, R., S Budalakoti, D. DeAngelis, and K. S. Barber, "Modeling Virtual Footprints: Impact on Security and Identity," ACM Transactions on Intelligent Systems and Technology, Special Issue on Trust in Multiagent Systems; 2011.
- 23. DeAngelis, D. and K. S. Barber. "Security Applications of Trust in Multi-Agent Systems," Journal of Computer Security, IOS Press. Vol. 19, Issue 1, pp. 57-99, 2011.
- 24. Jones, C.L.D., and K. S. Barber. "Combining Job and Team Selection Heuristics," LNCS: Coordination, Organizations, Institutions and Norms in Agent Systems IV: COIN 2008 International Workshops. p. 33-47, 2009.
- 25. Han, D., J. Park, K. Fullam, and K. S. Barber. "Application of Action Selection, Information Gathering, and Information Evaluation Technologies to UAV Target Tracking," Defense Applications of Multi-Agent Systems: International Workshop, DAMAS 2005, Utrecht, The Netherlands, July 25, 2005, Revised and Invited Papers, S. Thompson and R. Ghanea-Hercock, Eds., Springer, pp. 66-79. 2006.
- Lam, D.N., J. Ahn, and K. S. Barber. "Software Engineering Tools for Designing and Comprehending Agent Systems," Journal Special Issue on Agent-oriented Software Development Methodologies (AOSDM) in an International Journal of Multi-Agent and Grid Systems, IOS Press, Amsterdam, The Netherlands; pp. 1-17, 2006.
- Lam, D.N. and K. S. Barber. "Automated Interpretation of Agent Behavior," Springer-Verlag Lecture Notes in Artificial Intelligence (LNAI): Agent-Oriented Information Systems III: 7th International Bi-Conference AOIS 05 Workshop, Editors: Manuel Kolp, Paolo Bresciani, Brian Hendersen-Sellers, and Michael Winikoff, pp. 1-15, December 2006.
- C.E. Martin and K.S. Barber. "Adaptive Decision-Making Frameworks for Dynamic Multi-Agent Organizational Change," International Journal on Multi-Agent and Autonomous Agent Systems, Vol. 13, No. 3, ISSN: 1387-2532 (print) or 1573-7454 (online), Vol. 13, No. 3, pp. 391-428, Springer Netherlands, 2006.
- D. N. Lam, J. Ahn, and K. S. Barber. "Software Engineering Tools for Designing and Comprehending Agent Systems," International Journal of Multiagent and Grid Systems, H. Zhu and R. Unland, Eds., IOS Press, Volume 2, Number 4, pp. 473-489, 2006.
- Fullam, K., T. Klos, G. Muller, J. Sabater, Z. Topol, K. S. Barber, J. Rosenschein, and L. Vercouter. "The Agent Reputation and Trust (ART) Testbed Architecture," Artificial Intelligence Research and Development, B. López, J. Meléndez, P. Radeva, and J. Vitrià, Eds., Vol. 131 of Frontiers in Artificial Intelligence and Applications, pp. 389-396, IOS Press, 2006.
- Park, J., K. Fullam, D. Han, and K. S. Barber. "Agent Technology for Coordinating UAV Target Tracking," Knowledge-Based Intelligent Information and Engineering Systems, R. Khosla, R. Howlett, and L. Jain, Eds, pp. 831-837, Springer, 2005.
- 32. Fullam, K. and K. S. Barber. "A Temporal Policy for Trusting Information," Trusting Agents for Trusting Electronic Societies, R. Falcone, K. S. Barber, J. Sabater, and M. Singh, Eds., pp. 75-94, Springer, 2005
- Fullam, K., J. Sabater, and K. S. Barber. "A Design Foundation for a Trust-Modeling Experimental Testbed," Trusting Agents for Trusting Electronic Societies, R. Falcone, K. S. Barber, J. Sabater, and M. Singh, Eds., pp. 95-109. Springer, 2005.
- Park, J., Karen Fullam, David Han, K. S. Barber. "Agent Technology for Coordinating UAV Target Tracking," Knowledge-Based Intelligent Information and Engineering Systems, Lecture Notes in Computer Science, p. 831-837, Springer-Verlag, 2005.
- 35. Park, J. and K.S. Barber. "Information Quality Assurance by Lazy Exploration of Information Sources Combination Space in Open Multi-Agent Systems," Journal of Universal Computer Science, Vol. 11, Issue 1, pp. 193-209, 2005.
- Barber, K.S. and M. MacMahon. "Analyzing Application Characteristics Motivating Adaptive Organizational Capabilities within Multi-Agent Systems," Journal of Autonomous Agents and Multi-Agent Systems, Special Issue on Application Science, Kluwer Academic Publishers, 2005.
- 37. Barber, K.S. and J. Park. "Agent Belief Autonomy in Open Multi-Agent Systems," Agents and Computational Autonomy: Potential, Risks and Solutions, Lecture Notes in Computer Science, Springer-Verlag, Vol. 2969, pp. 7-16, 2004.
- 38. Barber, K.S. and M. MacMahon. "Quantifying the Search Space for Multi-Agent System (MAS) Decision-Making Organizations," (Invited) Connection Science, Special Issue: Agent Autonomy and Groups, Vol. 14, No. 4, 2003.

- Barber, K.S., G. Baker, T.J. Graser, and J.C. Holt. "Arcade: Early Dynamic Property Evaluation of Requirements Using Partitioned Software Architecture Models," Requirements Engineering Journal, Special Issue on Model-based Requirements Engineering, editors: Peri Loucopoulos and Colin Potts, Springer-Verlag, London, Vol. 8, No. 4, pp. 222-235, 2003.
- 40. Barber, K.S., T.J. Graser, J.C. Holt. "Evaluating Dynamic Correctness Properties of Domain Reference Architectures," (Invited) Journal of Systems and Software, Vol. 68, Issue 3, pp. 217-231, December 2003.
- 41. Barber, K. S., A. Goel, D. C. Han, J. Kim, D. N. Lam, T. H. Liu, M. MacMahon, R. McKay, C. E. Martin. "Infrastructure for Design, Deployment and Experimentation of Distributed Agent-based Systems: The Requirements, The Technologies and An Example," Journal of Autonomous Agents and Multi-Agent Systems, Special Issue on Infrastructure and Requirements for Building Research Grade Multi-Agent Systems, editors: Thomas Wagner and Omer Rana, Kluwer Academic Publishers, Vol. 7, No. 1 and 2, pp. 49-69, July 2003.
- 42. Barber, K.S. and J. Holt. "Software Architecture Correctness," (Invited) IEEE Software, Vol. 18, No. 6, pp. 64-65, November 2002.
- Barber, K. S. and C. E. Martin. "Dynamic Adaptive Autonomy in Multi-Agent Systems: Representation and Justification," (Invited) International Journal of Pattern Recognition and Artificial Intelligence (IJPRAI), Special Issue on Intelligent Agent Technology, World Scientific Publishing Company, Vol. 15, No. 3, pp.405-433, 2001.
- 44. Barber, K. S. and Cheryl E. Martin. "Flexible Problem-Solving Roles for Autonomous Agents," (invited) Integrated Journal on Computer-aided Engineering, Agent-Based Manufacturing Special Issue, Vol. 8, pp. 1–15, 2001.
- 45. Barber, K. S., T. H. Liu, S. Ramaswamy. "Conflict Detection During Plan-Integration for Multi-Agent Systems," IEEE Transactions on Systems, Man, and Cybernetics Part B: Cybernetics, Vol. 31, No. 4, pp. 616-628, 2001.
- Barber, K. S., P. S. Grisham, S. R. Jernigan, T. J. Graser. "Requirements Evolution and Reuse Using the Systems Engineering Process Activities (SEPA)," Australian Journal of Information Systems (AJIS) Special Issue on Requirements Engineering, Vol. 7, No. 1, pp. 75–97, 2001.
- Barber, K. S., R. McKay, A. Goel, D. Han, J. Kim, T. H. Liu, C. E. Martin. "Sensible Agents: The Distributed Architecture and Testbed," IEEE and IEICE (The Institute of Electronics, Information and Communication Engineers) Joint Special Issue on Autonomous Decentralized Systems. Vol. E83-B, No. 5, pp. 951–960, 2000.
- 48. Barber, K. S. and J. Kim. "Toward Flexible and Fault Tolerant Intelligent Manufacturing: Sensible Agents in Shop-Floor Control," (invited) Journal of Artificial Intelligence in Engineering Design and Manufacturing, Vol. 14, pp. 337–354, 2000.
- 49. Barber, K. S., A. Goel, C. E. Martin. "Dynamic Adaptive Autonomy in Multi-Agent Systems," Journal of Experimental & Theoretical Artificial Intelligence, Special Issue on Autonomy Control Software, Publisher: Taylor and Francis Ltd, London, Vol. 12, No. 2, pp. 129–147, April, 2000.
- 50. Barber, K. S., A. Goel, D. Han, J. Kim, T. H. Liu, C. E. Martin, R. M. McKay. "Simulation Testbed for Sensible Agentbased Systems in Dynamic and Uncertain Environments," (Invited) Transactions: Quarterly Journal of the Society for Computer Simulation International, Special Issue on Modeling and Simulation of Manufacturing Systems, Guest Editors: Michael Marefat and John Olson, Guest Editors, Vol. 16, No. 4, pp. 186–203, December, 1999.
- Barber, K. S., T. H. Liu, A. Goel, and S. Ramaswamy. "Flexible Reasoning Using Sensible Agent-based Systems: A Case Study in Job Flow Scheduling," Special Issue of Production Planning and Control, Vol. 10, No. 7, pp. 606–615, 1999.
- 52. Ramaswamy, S. and K. S. Barber. "A Design Architecture for Modeling, Analysis and Design of Manufacturing Control Software," Journal of Intelligent Control and Systems, Vol. 2, No. 4, pp. 485–510, 1999.
- 53. Swaminathan, A., S. A. Shaikh, and K. S. Barber. "Design of an Experience-based Assembly Sequence Planner for Mechanical Assemblies," Robotica: International Journal of Information, Education, and Research in Robotics and Artificial Intelligence, Special Issue on Intelligent Robotic Assembly, Vol. 16, No. 3, pp.265–283. May–June 1998.
- 54. Jernigan, S. R., S. Ramaswamy, and K. S. Barber. "A Distributed Search and Simulation Method for Job Flow Scheduling Simulation," Simulation, Vol. 68, No. 6, pp. 377–401, June 1997.
- 55. Ramaswamy, S., K. P. Valavanis, K. S. Barber, "Petri Net Extensions for the Development of MIMO Net Models of Automated Manufacturing Systems," Journal of Manufacturing Systems, Vol. 16, No. 3, pp. 175–191, May–June 1997.
- Barcio, B.T., S. Ramaswamy, K. S. Barber. "An Object-Oriented Modeling and Simulation Environment for Reactive Systems Development," Citation for Excellence Highest Quality Rating, International Journal of Flexible Manufacturing Systems, Vol. 9, No. 1, pp. 51–80, January 1997.
- 57. Suraj, A., S. Ramaswamy, and K. S. Barber, "Extended State Charts for the Modeling and Specification of Manufacturing Control Software Systems," International Journal of Computer Integrated Manufacturing Systems, Special issue on Design

and Implementation of Computer-Integrated Manufacturing Systems: Integration and Adaptability Issues, Vol. 10, No. 1–4, pp.160–171, 1997.

- Barber, K. S. "A Knowledge-based System Enabling Application Perspectives for CAD/CAM Integration," International Journal of Expert Systems: Research and Applications, Special Issue on Knowledge-based Planning, JAI Press, Vol. 9, No. 3, pp. 409–444, 1996.
- Swaminathan, A. and K. S. Barber. "An Experience-based Assembly Sequence Planner for Mechanical Assemblies," IEEE Transactions on Robotics and Automation, Special Issue on Assembly and Task Planning for Manufacturing, Vol. 12, No. 2, pp. 252–267, April 1996.
- 60. Barcio, B. T., S. Ramaswamy, R. Macfadzean, K. S. Barber, "Object-Oriented Analysis, Modeling and Simulation of a Notional Air Defense System," Simulation, Vol. 66, No. 1, pp. 5–21, January 1996.
- 61. Barber, K. S., O. R. Mitchell, and K. A. Harbison-Briggs, "An Object-based System Incorporating Representations and Reasoning Mechanisms to Plan Manufacturing Applications," Journal of Systems Engineering, Vol. 5, pp. 36–47, 1995.

<u>Book</u>

1. K.S. Barber, et.al., "Handbook of Identity Management and Security: A Multidisciplinary Approach," in-progress and presenting to publishers.

Book Chapters

- 1. Zaeem, R. N., and K. S. Barber, "Privacy, a Machine Learning Perspective," (Invited) 3rd edition of Springer Encyclopedia of Cryptography, Security, and Privacy. (to appear December 2020)
- 2. Zaeem, R. N., and K. S. Barber, "Digital Identity Theft and Fraud," (Invited) 3rd edition of Springer Encyclopedia of Cryptography, Security, and Privacy. (to appear December 2020)
- 3. DeAngelis, D., R. Nokhbeh Zaeem, and, K. S. Barber, "Finding and Motivating Trusted Expert Participation in Online Communities," (Invited) Applications of Agent Models and Architectures, IGI Global, 2018.
- 4. Graser, T.J. and K.S. Barber. "Systematic Derivation and Evaluation of Domain-Specific, Implementation-Independent Software Architecture," Advances in Management Information Systems (AMIS) Monograph Series volume entitled Information Systems Analysis and Design: Foundation, Methods and Practices. Series Editor: Vladimir Zwass, Publisher M.E. Sharpe, Inc., April 2009.
- Ahn, J, D. DeAngelis, and K. S. Barber. "Teammate Selection Using Multi-dimensional Trust and Attitude Models," Trust in Agent Societies, Springer Lecture Notes in Computer Science on 11th International Workshop, TRUST 2008, Estoril, Portugal, May 12 -13, 2008, Falcone, R.; Barber, K.S.; Sabater-Mir, J.; Singh, M.P. (Eds.) Series: Subseries: Lecture Notes in Artificial Intelligence, Vol. 5396 (ISBN: 978-3-540-92802-7), pp. 1-24, 2008.
- Fullam, K. and K. S. Barber. "Information Valuation Policies for Explainable Trustworthiness Assessment in E-Services," Trust in E-Services: Technologies, Practices and Challenges, R. Song, L. Korba, and G. Yee, Eds., Idea Group, Chapter VII, pp. 168-197, 2007.
- Fullam, K., T. Klos, G. Muller, J. Sabater, K. S. Barber, and L. Vercouter. "The Agent Reputation and Trust (ART) Testbed," Trust Management, Lecture Notes on Computer Science, Eds: K. Stølen, W. Winsborough, F. Martinelli, and F. Massacci, Springer Berlin / Heidelberg, Volume 3986/2006, pp. 439-442, 2006.
- Fullam, K. and K. S. Barber. "A Temporal Policy for Trusting Information," Trusting Agents for Trusting Electronic Societies, R. Falcone, K. S. Barber, J. Sabater, and M. Singh, (Eds.), Lecture Notes in Computer Science, Springer Verlag, ISBN: 978-3-540-28012-5, Vol. 3577, pp. 75-94, 2005.
- Fullam, K., J. Sabater, and K. S. Barber. "Toward a Testbed for Trust and Reputation Models," Trusting Agents for Trusting Electronic Societies, R. Falcone, K. S. Barber, J. Sabater, and M. Singh, (Eds.), Lecture Notes in Computer Science, Springer Verlag, pp. 95-109, 2005.
- 10. Vanzin, Marcelo M. and K.S. Barber. "Decentralized Partner Finding in Multi-Agent Systems," (Invited) Coordination of Large Scale Multi-agent Systems, ISBN: 978-0-387-26193-5, pp. 75-98, 2006.
- Han, D. C. and K. S. Barber. "Desire-space Analysis and Action Selection for Multiple, Dynamic Goals," Computational Logic in Multi-Agent Systems, Lecture Notes in Artificial Intelligence, Edited by Leite, João; Torroni, Paolo, Springer-Verlag, ISBN: 3-540-28060-X, Vol. 3487, pp. 249-264, 2005.
- Lam, D. N. and K. S. Barber. "Debugging Agent Behavior in an Implemented Agent System," Programming Multi-Agent Systems, Bordini, R.H.; Dastani, M.; Dix, J.; Seghrouchni, A.E.F. (Eds), Lecture Notes in Computer Science, Springer-Verlag, Vol. 3346, pp. 104-125, Spring 2005.

- Barber, K.S. and M. MacMahon. "Application Characteristics Motivating Adaptive Organizational Capabilities within Multi-Agent Systems," An Application Science for Multi-Agent Systems, Edited by Thomas Wagner, Kluwer Academic Publishers, pp. 175-198, 2004.
- Barber, K. S., K. Fullam, and J. Kim. "Challenges for Trust, Fraud, and Deception Research in Multi-agent Systems," () Trust, Reputation, and Security: Theories and Practice, Lecture Notes in Artificial Intelligence, Edited by R. Falcone, K.S. Barber, L. Korba, and M. Singh, Springer Press, pp. 8-14, 2003.
- Barber, K. S. and J. Kim. "Soft Security: Isolating Unreliable Agents from Society," (Invited) Trust, Reputation, and Security: Theories and Practice, Lecture Notes in Artificial Intelligence, Edited by R. Falcone, K. S. Barber, L. Korba, and M. Singh, Springer Press, pp. 224-234, 2003.
- Barber, K.S. and J. Kim. "Belief Revision Process based on Trust: Agent Evaluating Reputation of Information Sources," Trust in Cyber-societies: Integrating the Human and Artificial Perspectives, Lecture Notes in Computer Science, Edited by R. Falcone, M. Singh, and Y.H. Tan, Springer Press, Vol. 2246, pp. 73-82, 2002.
- Barber, K.S., C. E. Martin, and R. M. McKay. "A Communication Protocol Supporting Dynamic Autonomy Agreements," Advances in Artificial Intelligence. PRICAI 2000 Workshop Reader, Lecture Notes in Computer Science, Edited by R. Kowalczyk, S.W. Loke, N.E. Reed, and G. Williams, Springer-Verlag Heidelberg press (ISSN: 0302-9743), Vol. 2112/2001, pp. 303-320, 2001.
- Barber, K.S. and C. E. Martin. "Autonomy as Decision-Making Control," Intelligent Agents VII: Agent Theories, Architectures and Languages, Editors: Cristiano Castelfranchi and Yves Lesperance, Lecture Notes in Artificial Intelligence: Sub-series of Lecture Notes in Computer Science, Edited by J.G. Carbonell and J. Siekmann, Springer Press, Vol. 1986, pp. 343-345, 2001.
- Barber, K.S., C. E. Martin, N. Reed, D. Kortenkamp, and G. Dorais. "Dimensions of Adjustable Autonomy: Panel Discussion," Advances in Artificial Intelligence. PRICAI 2000 Workshop Reader, Lecture Notes in Artificial Intelligence, ISBN: 978-3-540-42597-7, Berlin, pp. 353-361, 2001.
- Barber, K. S., D. C. Han, T. H. Liu. "Strategy Selection-based Meta-level Reasoning for Multi-Agent Problem Solving," Agent Oriented Software Engineering, Editors: Paolo Ciancarini and Michael J. Wooldridge, Lecture Notes in Computer Science, Springer Press, Vol. 1957, pp. 269-284 of a 321 page book, January 2001.
- 21. Barber, K. S. and C.E. Martin. "The Motivation for Dynamic Decision-Making Frameworks in Multi-Agent Systems," Agent Engineering, World Scientific Publishing, pp. 59-92, 2001.
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- 68. K. Suzanne Barber, "Your Connected Identity Assets," Texas Perspectives, March 2014.

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- 1. PrivacyCheck, copyrighted 2017-2020. Downloadable at https://identity.utexas.edu/privacycheck-for-google-chrome.
- 2. ID360 Scorecard. copyrighted, 2017-2020. ID360 Scorecard system serves as benchmarking tool for identity management best practices.
- 3. Beat the Breach, copyrighted, 2017-2020. Beat the Breach is a game designed to educate users how to best design their human and technical defenses against data breaches.
- 4. Beat the Thief, copyrighted 2014-2020. Available on GooglePlay and AppStore (https://identity.utexas.edu/beat-the-thief-game).
- 5. IDWISE Risk Kit, copyrighted 2014-2020. <u>https://identity.utexas.edu/risk-kit-app</u>.
- 6. Requirements and Integration Verification Tool (RIVT), copyrighted 1997-2000.
- 7. Reference Architecture Representation Environment (RARE), copyrighted 1998-2002.
- 8. Hybrid Domain Representation Archive (HyDRA), copyrighted 1997-2000.
- 9. Architecture Analysis Dynamic Environment (ArcADE), copyrighted 2000-2002.
- 10. Application Specification Environment and Registration Tool (ASERT), copyrighted 2000-2002.
- 11. Sensible Agent Testbed, copyrighted 1998-2004.
- 12. Designer's Agent Creation and Analysis Tool Suite, copyrighted 2001-2005.

RESEARCH GRANTS AND CONTRACTS:

- "Identity in 5G," Experis with Verizon, 1/16/20 1/15/21, \$520,761
- "UT Privacy-preserving Contact Tracing App" ECE Research Seed Grant, 6/1/20 8/31/20, \$8,125.
- "UT CID Identity Ecosystem," Center for Identity Strategic Partners, Industrial Affiliate Program, PI: K. Suzanne Barber, 9/1/19 8/31/20, \$150,000.
- "Identity Threat Assessment and Prediction Project," Center for Identity Strategic Partners, Industrial Affiliate Program, PI: K. Suzanne Barber, 9/1/19 8/31/20, \$100,000.
- "Privacy Check," Center for Identity Strategic Partners, Industrial Affiliate Program, PI: K. Suzanne Barber, 9/1/19 8/31/20, \$110,000.
- "Trust Filter," Center for Identity Strategic Partners, Industrial Affiliate Program, PI: K. Suzanne Barber, 9/1/19 8/31/20, \$176,000.
- "Identity Leadership," Identity Theft Resource Center, 3/1/19 3/31/19, \$30,000.
- "UT CID Identity Ecosystem," Center for Identity Strategic Partners, Industrial Affiliate Program, PI: K. Suzanne Barber, 9/1/18 5/31/19, \$100,000.
- "Identity Threat Assessment and Prediction Project," Center for Identity Strategic Partners, Industrial Affiliate Program, PI: K. Suzanne Barber, 9/1/18 5/31/19, \$100,000.
- "Privacy Check," Center for Identity Strategic Partners, Industrial Affiliate Program, PI: K. Suzanne Barber, 9/1/18 8/31/19, \$60,000.
- "Trust Filter," Center for Identity Strategic Partners, Industrial Affiliate Program, PI: K. Suzanne Barber, 9/1/17 8/31/18, \$50,000.
- Digital Futures, "Personas and Threats in the Identity Ecosystem Feedback and Refinement," PI: K. Suzanne Barber, 10/1/17 6/31/18, \$143,815.
- Department of Homeland Security (DHS) Office of Biometric Identity Management (OBIM), "Biometrics Opportunity Architecture: Biometrics Improving Quality of Life," PI: K. Suzanne Barber, 9/25/2017 12/26/2018, \$573,390.
- TransUnion, "Consumer Biometrics," 12/1/15 5/31/17, \$75,000. Digital Futures, "Personas and Threats in the Identity Ecosystem Feedback and Refinement," PI: K. Suzanne Barber, 7/1/17 1/31/18, \$143,815.
- Defense Threat Reduction Agency (DTRA), "Surety BioEvent App," PI: K. Suzanne Barber, Co-PIs: Lauren Meyers and Andy Ellington, 5/1/14 4/30/17, \$2,771,939. (KSB Portion: \$1,441,408)
- Island Financial, "Identity Values and Liabilities," 11/1/2015 12/31/15, \$20,000.
- TransUnion, "Consumer Biometrics," 12/1/15 5/31/17, \$75,000.
- MorphoTrust and National Institute of Standards and Technology (NIST), "Level of Assurance Evaluation," PI: K. Suzanne Barber, 10/1/14 2/28/15, \$66,351
- State of Texas, "Trust Online: Identity Security & Privacy for Citizens & Businesses," PI: K. Suzanne Barber, 9/1/13 8/31/15, \$5M.
- National Science Foundation (NSF), "IGERT: Sustainable Grid Integration of Distributed and Renewable Resources, National Science Foundation," Co-PIs: Ross Baldick, Tom Edgar, Alexis Kwasinski, Michael Weber, 7/1/10 – 6/30/15, \$1,227,203.
- National Science Foundation (NSF), "Sustainable Grid Integration of Distributed and Renewable Resources," Co-PIs: Ross Baldick, Tom Edgar, Alexis Kwasinski, Michael Weber, 7/01/10 06/30/15, \$630,806.
- "Systems Engineering for Test Evaluation Assessments," U.S. Army Operational Test Command, \$100,000, 6/1/13 5/31/14.
- "IGERT: Sustainable Grid Integration of Distributed and Renewable Resources," National Science Foundation, PIs: Ross Baldick, K. Suzanne Barber, Tom Edgar, Alexis Kwasinski, Michael Weber, \$3,129,768, 7/1/10 6/30/15.
- IBM, "Identity Analytics and Visualization," 5/1/12 8/31/12, \$48,000.
- Department of Homeland Security (DHS), "Sensor and Social Networks Armed to Detect and Defend against Terrorist Attacks," PI: K. Suzanne Barber, 9/1/09 11/30/09, \$40,000.
- Naval Undersea Warfare Center, "Wargaming and Investigations for Identifying Distributed Networking Technologies for Unmanned Distributed Networked Systems," PI: K. Suzanne Barber, 10/1/09 9/30/09, \$80,000.
- DARPA, Building Problem Solving Teams for Dynamic Human and Agent Collaboration, 9/1/08 10/31/10, \$189,000.

- Cougaar Software, "Intelligent Expert Finding and Team Building," 1/5/07 12/15/07, \$50,000.
- Lockheed Martin, "ConX: Getting Answers on Demand," 8/1/07 1/31/08, \$150,000.
- Office of Naval Research, "Rational Explanation of Beliefs, Intentions, and Threats (REBIT) Tool for Maritime Domain Awareness," 1/16/06 1/15/08, \$627,736.
- Office of Naval Research, "Support for Predicting Improvised Explosive Device Attacks (SPIED)," 8/15/05 9/30/08, \$900,000.
- Defense Advanced Research Projects Agency (DARPA), "Multi-Scale Behavioral Modeling and Analysis Promoting a Fundamental Understanding of Agent-based System Design and Operation," 6/1/00 9/30/06, Co-PIs: Luis Carpinella, Irene Gamba, Ari Arapostathis, \$1,597,288.
- U.S. Army University XXI Program, "Sensible Agents for C3 Driver," 12/1/03 9/30/05, \$200,000.
- U.S. Congress, "Systems Engineering and Distributed Agent-based Planning" National Consortium for Biological/Chemical Countermeasures administered through Institute of Advanced Technologies (IAT), Co-Investigators: Steve Kornguth (IAT), Gordon Boezer (Institute of Defense Analysis), Jim Chambers (UT-San Antonio), Andy Ellington (UT-Austin), George Georgiou (UT-Austin), Adam Heller (UT-Austin), Stephen Johnston (UT-Southwest Medical); Shelley Payne (UT-Austin), Michael Mastrangelo (BioD Communications), Dennis Perrotta (Texas Department of Health); Bob Shope (UT-Medical Branch), Eric Anslyn (UT-Austin), John McDevitt (UT-Austin), Mehmet Erengil (IAT), David Eaton (UT-Austin), Jerry Davis (UT-Center for Strategic Analysis), Steve Collier (State of Texas, Office of Emergency Management), 6/1/04 – 10/30/05, \$82,000, (Barber Portion), Total Program Amount: \$1,150,000.
- Visitech and Defense Modeling and Simulation Office (DMSO), "Sensible Agents for Composable Simulations," 4/29/03 4/19/04, \$75,000.
- ScenPro, Inc. and Air Force Research Laboratories, "Biological/Chemical Incident Response Monitor," 6/1/02 5/31/04, \$167,479.
- IAT and U.S. Congress, "Information Systems for Distributed Chem-Bio Incident Response," 1/1/03 12/31/03, \$120,000 (Barber portion), Multi-University, Multi-PI grant totaling \$3.5 M.
- Defense Advanced Research Projects Agency (DARPA) and Army Research Laboratory (ARL), "Agents Augmenting Human Cognition for Measured Improved Performance, 3/1/02 09/30/04, \$200,000.
- Schlumberger, "Management and Analysis of Software Engineering Artifacts to Promote Collaboration and Reuse," 7/1/01 8/30/06, \$60,000.
- Defense Advanced Research Projects Agency (DARPA), "Distributed Sensible Agents Supporting Human-Information System Interaction: Dynamic Adaptive Autonomy For Responsive Decision-making," 1/1/00-5/17/03, \$300,000.
- Defense Advanced Research Projects Agency (DARPA and National Cancer Institute), "Distributed Sensible Agents Supporting Human–Information System Interaction: Dynamic Adaptive Autonomy For Responsive Decision-making," 2/1/99 5/17/03, \$1,752,131.
- Texas Higher Education Coordinating Board Advanced Technology Program, "Dynamic Configuration of Agent-based Decision-Making Systems for Manufacturing Enterprises," 1/1/00 12/31/01, \$134,396. (Industry and Government Collaborators include: Harvard Manufacturing, MITRE, BBN/GTE Technologies, IC², Applied Research Laboratories, and Naval Surface Warfare Center)
- U.S. Congress, "Agent Systems: Review and Projections," University 21 Program administered through Institute of Advanced Technologies (IAT), Co-Investigators: Aubrey White (Institute of Advanced Technologies at UT-Austin), Bruce Porter (CS Department) at UT-Austin, Jim Wall (Texas A&M University) and John Stawasz (Applied Research Laboratories), 9/1/00 – 5/1/01, \$50,000, (Barber Portion), Total Program Amount: \$1,150,000.
- U.S. Congress, "Information Systems for Distributed Chem-Bio Incident Response," National Consortium for Biological/Chemical Countermeasures administered through Institute of Advanced Technologies (IAT), Co-Investigators: Steve Kornguth (IAT), Gordon Boezer (Institute of Defense Analysis), Jim Chambers (UT-San Antonio), Andy Ellington (UT-Austin), George Georgiou (UT-Austin), Adam Heller (UT-Austin), Stephen Johnston (Southwest Medical), Shelley Payne (UT-Austin); Michael Mastrangelo (Texas Department of Health), Dennis Perrotta (Texas Department of Health), Bob Shope (UT-Medical Branch); Ellen Wartella (UT-Austin), Eric Anslyn (UT-Austin), John McDevitt (UT-Austin), Mehmet Erengil (IAT), David Eaton (UT-Austin), Jerry Davis (UT-Center for Strategic Analysis), Steve Collier (State of Texas, Office of Emergency Management), 2/1/00 – 5/30/01, \$120,551 (Barber Portion), Total Program Amount: \$5M.
- Defense Modeling and Simulation Office (DMSO), "System Engineering for Advanced, Distributed Simulation Environments," 4/1/00 9/30/00, \$60,000.

- U.S. Congress, "Distributed Decision-Making in the Digital Battlefield," University 21 Program administered through Institute of Advanced Technologies (IAT), Co-Investigators: Aubrey White (Institute of Advanced Technologies at UT-Austin), Bruce Porter (CS Department) at UT-Austin, Jim Wall (Texas A&M University) and John Stawasz (Applied Research Laboratories), 9/1/99 – 3/1/00, \$50,000 (Barber Portion), Total Program Amount: \$924,000.
- ScenPro, Inc. and Rome Laboratories, "Biological/Chemical Incident Response Monitor," Co-Investigators from Prime Contractor, ScenPro: Mark Swenholt and Lisa Mantock, 8/1/99 7/31/00, \$30,797 (Barber Portion), Total Program Amount: \$100,000.
- BBN Technologies/GTE and DARPA, "Architectures and System Configuration Evaluations of the Air Operations Enterprise Model," Co-Investigators from Prime Contractor, BBN Technologies: Marty Brown, 9/15/99 1/31/01, \$871,793 (Barber Portion), Total Program Amount: \$5.3M.
- Naval Surface Warfare Center, "Sensible Agents for Naval Command and Control," 11/1/99 5/1/00, \$170,000.
- Army Research Laboratory, "Battlefield Digitization," 8/1/99 12/1/99, \$50,000.
- Defense Advanced Research Projects Agency (DARPA and National Cancer Institute), "Distributed Sensible Agents Supporting Human-Information System Interaction: Dynamic Adaptive Autonomy For Responsive Decision-making," 2/1/99 – 7/31/00, \$910,000.
- Allied Signal, "Software Engineering: Problems and Solutions," 4/15/98 8/31/00, \$10,000.
- Applied Research Laboratory, "Java-based Simulation Frameworks," 1/15/98 5/31/98, \$50,000.
- Defense Modeling and Simulation Office and Applied Research Laboratory, "Evaluation of Conceptual Modeling and Simulation Tool," 12/10/97 8/31/98, \$100,000.
- Defense Advanced Research Projects Agency (DARPA), "Knowledge Engineering Assistance and System Configuration Evaluation for the Protocol-driven Health Care Domains, 5/1/98 9/30/98, \$160,519.
- Lockheed Martin, "Sensible Agent Planning for Conceptual Design Trade Studies," 2/1/98 5/31/98, \$50,000.
- Texas Higher Education Coordinating Board Advanced Technology Program, "Adapting the Autonomy of Sensible Agents: Coordinated Systems Operating in Complex, Dynamic Environments," 1/1/97 8/31/00, \$300,000. (Industry and Government Collaborators include: Lockheed Martin, Eastman Kodak, IC², Applied Research Laboratories, and Naval Surface Warfare Center).
- Defense Advanced Research Projects Agency (DARPA), "The Requirements and Integration Verification Tool (RIVT) Targeting Emergency Medical Care Applications," 9/1/97 12/31/97, \$99,959.
- Defense Advanced Research Projects Agency (DARPA), "Intelligent Agent Research & Development for Collaboration in Virtual Worlds used in Training: An Architecture to Support Varying Levels of Autonomy," 7/15/97–8/31/97, \$49,991
- Defense Advanced Research Projects Agency (DARPA), "Sensible Agent Research & Development in Support of Computer-Aided Education and Training Initiative Testbed Demonstrations," 3/10/97 3/31/97, \$52,500.
- Sloan Foundation, "Construction 21st Century," Co Investigators: Richard L. Tucker, Jim T. O'Connor, Carl T. Haas, Jonathan F. Bard, Richard F. Brose, Alison Davis-Blake, G. Edward Gibson, J.G. Voeller, 1/15/97 – 12/31/99, \$250,000 (Barber portion), Total Amount Awarded \$1,980,000.
- Science Applications International Corporation (SAIC), "Tools and Technology for Affordable Multi-Missile Manufacturing," 11/22/96 3/31/98, \$235,536.
- Texas Higher Education Coordinating Board Advanced Technology Program, "Controlling the Autonomy of Sensible Agents in Manufacturing Environments," Co-Investigator from UT-Arlington: Karan Harbison, 1/1/96 – 12/31/97, \$169,400 (Barber Portion), Total Program Award: \$294,400. (Industry and Government Collaborators include: Texas Instruments, Eastman Kodak, Tracor, Reveille Technology, IBM, and Naval Surface Warfare Center).
- Naval Surface Warfare Center, "Simulation-based Design of Combat Systems," 8/15/95 2/1/97, \$463,437 (Total Amount Received to Date: \$71,200).
- Office of Naval Research, "Dynamic Adaptive Autonomy for Multi-Agent Systems," 12/1/95 12/31/97, \$130,000.
- L.L. and Ethel Dean Grants for Undergraduate Research, "A Visualization and Tracking System for a Virtual Decision Environment," 5/1/95 5/31/96, \$1,000.
- National Science Foundation (NSF), "Engineering Research Equipment: Virtual Decision Environment," 3/1/95 2/29/96, \$30,100.
- National Science Foundation (NSF), "The Stability of Autonomous Agents in Dynamic, Complex Manufacturing Environments," 6/1/94 5/31/96, \$49,999.

- Texas Higher Education Coordinating Board Advanced Technology Research, "Sensible Agents for Planning and Control in Dynamic Manufacturing Environments," Co-Investigator from UT-Arlington: Karan Harbison, 1/1/94 – 8/31/96, \$171,537 (Barber Portion), Total Program Award: \$300,000. (Industry and Government Collaborators include: Techsus Medical Systems, National Center for Manufacturing Sciences, Quality Management Consortia, ScenPro, CTA, U.S. Air Force Wright-Patterson)
- Texas Higher Education Coordinating Board Advanced Technology Development, "Multi-Tool Integration Kernel for Component-based Architecture Development," Co-Investigator from UT-Arlington: Karan Harbison, 1/1/94 – 8/31/96, \$124,888 (Barber Portion), Total Program Award: \$300,000. (Industry and Government Collaborators include: National Center for Manufacturing Sciences, IBM, Sarcos Research Corp., Texas Instruments, General Motors, Quality Management Consortia, U.S. Air Force Wright-Patterson)
- Vera Simons, "Virtual Reality for Intelligent Systems," 6/9/93 6/8/96, \$3,400.
- Texas Higher Education Coordinating Board Advanced Technology Research, Supplement to "Sensible Agents for Planning and Control in Dynamic Manufacturing Environments" grant to support minority undergraduate student , 11/1/94 5/1/95, \$5,000.
- General Motors Foundation, "Intelligent Control," 11/1/93 10/31/95, \$20,000.
- Intel, Development of Virtual Environments, One Pentium-based computer system, Fall 1995, \$2,000.
- Project QUEST "An Intuitive Interface for the Manipulation and Control of Virtual Environments," One Macintosh 6100 and Laser Printer, Spring 1995, \$3,000.
- IBM Equipment Grant, "Intelligent Product Life Cycle Workbench (PLCW)," PowerPC workstation, 1994, \$4,000.
- Fluor Daniels, Inc., "Virtual Environments," 10/1/93 9/30/94, \$4,000.
- Naval Surface Warfare Center, "The Identification of Research and Technology Appropriate to Naval Combat Systems," 6/1/93 7/31/93, \$2,455.
- National Center for Manufacturing Sciences, "Intelligent Process Planning for Manufacturing Systems," 5/29/93 8/31/93, \$9,950.
- The University Research Institute, "Fuzzy, Agent-based Resource Specification Incorporating Product and Process Knowledge for a Manufacturing Facility" 6/1/93 7/31/93, \$12,556.
- Martin Marietta, Inc., "Express Schema Development of the Information Base for Next Generation Controller Program," Co-Investigator: K.A. Harbison-Briggs, 8/1/91–1/15/92, \$16,500.
- Martin Marietta, Inc., "Specification for the Information Base for the Next Generation Controller Program," Co-Investigator: K.A. Harbison-Briggs, 8/1/91 – 1/15/92, \$175,000.
- Martin Marietta, Inc., "Requirements Analysis and Specification for the Information Base for the Next Generation Controller Program," Co-Investigator: K.A. Harbison-Briggs, 2/7/91 2/10/92, \$46,000.
- Martin Marietta, Inc., "Evaluation, Testing, and Compliance for Platform Services in the Open Architecture for the Next Generation Controller Program," Co-Investigators: K.A. Harbison-Briggs and J.C.M. Tiernan, 1/5/91 – 3/30/91, \$60,000.
- Automation and Robotics Research Institute (ARRI), "Product Data Driven Controller (PDDC)," 12/1/88 12/1/91, \$150,000.

ADMINISTRATIVE AND COMMITTEE SERVICE:

Department Committees

- ECE Community Well-being and Support, Co-Chair, 2020 present.
- Software Engineering Graduate Students Admissions Committee, 2004 present.
- Software Engineering Prequalifying Committee, 2010 present.
- Faculty Advisor, Electrical and Computer Engineering, September 1992 present.
- Senior Faculty Search Committee, September 2016 August 2017.
- Faculty Evaluation Committee, September 2015 August 2016.
- Faculty Advisor, Software Engineering Executive M.S. (Option III) Degree Program, September 2002 August 2015.
- ECE Faculty Hiring Committee, 2012-2013.
- Department Faculty Evaluation Committee, Fall 2011.

- Software Engineering Faculty Recruiting Committee, September 2007 2011
- ECE Graduate Student Recruiting Committee, 1992 2010.
- Software Engineering Area Committee, Chair, 2005 2010.
- Departmental Faculty Strategic Hiring Committee, Fall 2004 2009.
- Software Engineering Undergraduate Curriculum Committee, Chair, 2002 2008.
- Management and Production Course Area Committee, 1992 2005.
- Control Systems Area Committee, 1993 2004.
- Industry Liaison Committee, 1993 2004
- Minority Student Committee, 1992 2004.
- Freshman Course Area Committee, Chair: Spring 1997 Fall 1998; member: Fall 1998-2003.
- Software Engineering Lecture Series, Organizing Committee, Summer-Fall 1998; Summer 1999 Spring 1999.
- ENS Renovations Committee, Fall 1997 Fall 1999.
- ECE Chair Search Committee, Spring 1997.
- Adhoc Committee to Review the Undergraduate Curriculum, 1994 1995.
- Software Design and Development (M.S. curriculum development), joint committee with Computer Sciences, 1993-1994.
- Circuits and Systems Course Area Committee, 1992 1994.

School of Engineering Committees

- Cultural Awareness Committee, Faculty Chair, 2020 present.
- Diversity, Equity and Inclusion Committee, 2020 present.
- Engineering Equal Opportunity Advisory Committee, 2011 2016.
- Schlumberger Center of Excellence Team, 2001 2012.
- Hocott Award Committee, 1996, 1999, 2002, 2006, 2007, 2008.
- Women in Engineering Program Steering Committee, 1995 Fall 2005.
- Manufacturing Steering Committee, 1994 2002.
- Review Committee for the Executive Software Engineering Program, Spring 1999.
- Ad Hoc Committee for Center in Manufacturing, August 1996 1999.
- Systems and Software Engineering Institute, Chairperson of the Board, August 1996 September 1999.
- Consultative Committee for Director-Manufacturing Systems Engineering, June 1996 1998.
- Systems and Software Engineering Institute, Board Chair (1996 present) and Program Committee (1995 1999).

University Committees

- Center for Identity, Director, September 2010 Present.
- M.S. degree program in Information Security and Privacy, Director & Faculty Advisor, September 2015 present.
- Child Identity Protection Task Force, Center for Identity, Spring 2012 2016.
- Department Chair and Center Director Leadership Working Group, Spring 2005.
- Curricular initiative for Information Technology, Academic Year 2000-2001.
- Consultative Committee for Selection of The University of Texas VP-Research, September 1998 May 1999.
- Ad-Hoc Search Committee for Information Technology Division Director, Applied Research Labs, April May 1998.
- Intellectual Property Rights Committee, 1997 2000.
- Committee for the Support and Advancement of Women, Advisory Committee to the President, Fall 1997 2000.
- Research Infrastructure Enhancement Committee (RISE), 1995 2001.
- Women Leading Technology, Steering Committee, 1996 2001.

- Parking and Traffic Committee, 1997 1999.
- Committee on The University of Texas Core Values and Purpose, 1996 1997.

Government Committees

- Department of Homeland Security (DHS) Data Privacy and Integrity Advisory Committee, Subcommittee on Biometric Technology and Policy serving DHS Secretary, 2017 2019.
- Department of Homeland Security (DHS) Data Privacy and Integrity Advisory Committee serving the Secretary of Homeland Security, June 2012 December 2019.
- National Aviation Intelligence Integration Office, Insider Threat Advisory Committee, 2016 2019.
- Information Security Workforce Development Committee, commissioned by Department of Information Resources, State of Texas, 2013 2016.
- Army Science Board, September 2005 2016.
- Texas First Responder Advisory Committee (FRAC), September 2011 2016.
- U.S. Information Sharing Environment (<u>http://ise.gov/</u>), August 2011 2016.
- Texas Homeland Security IT Subcommittee on Identity, May 2011 2016.
- ANSI, Protected Health Information (PHI) Advisory Committee, April 2011 September 2012.
- Institute of Defense Analysis Advisors and Consultants, September 2004 August 2012.
- DARPA Intelligent Processing Technology Office Working Group, 2005 2006.
- Defense Science Study Group, DARPA and Institute of Defense Analysis (IDA), 2002 2003.
- Engineering for Design and Manufacturing Panel, Review of National Science and Technology Board Manufacturing Infrastructure Subcommittee directions, September 1994 2000.
- National Research Council, Site Visitor and Review Panelist, June 1994 September 2002.
- Texas Higher Education Coordinating Board Advanced Research Program and Advanced Technology Program, Panel member reviewing ATP program, December 8, 1994.
- Computer Science and Telecommunications Board, Manufacturing Studies Board, National Research Council, March 1994 September 1994.
- Intelligent Product Processing Initiative (IPPI) sponsored by U.S. Air Force, Technical Review Board, 1994 1995.
- Next Generation Controller (NGC) Program sponsored by the U.S. Air Force and National Center for Manufacturing Sciences, Technical Review Board, September 1990 to August 1994.
- Air Force Wright Laboratory Intelligent Machining Workstation (IMW) Program, Industrial Review Board, 1988-1989.

Conference Committees

- International Conference on Intelligent Systems and Applications (INTELLI 2020), June 28 July 02, 2020, Athens, Greece, Program Committee.
- International Conference on Agents and Artificial Intelligence (ICAART), February 22-24, 2020, Valleta, Malta, Program Committee.
- International Conference on Agents and Artificial Intelligence (ICAART), February 19-21, 2019, Prague, Czech Republic, Program Committee.
- International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems, July 9-11, 2019, Graz, Austria, Program Committee.
- International Conference on Intelligent Systems and Applications (INTELLI 2019), June 30 July 04, 2019, Rome, Italy, Technical Review Committee.
- Artificial Intelligence International Conference, November 21-23, 2018, Barcelona, Spain. Review Committee.
- International Conference on Agents and Artificial Intelligence (INTELLI 2018), June 24 28, 2018, Venice, Italy, Technical Review Committee.
- International Conference on Agents and Artificial Intelligence (ICAART), January 16-18, 2018, Funchal-Madeira, Portugal, International Program Committee.

- International Conference on Agents and Artificial Intelligence (ICAART), February 24-26, 2017, Porto, Portugal, International Program Committee.
- International Conference on Industrial, Engineering & Other Applications of Applied Intelligent System, June 27-30, 2017, Arras, France, Program Committee.
- IEEE International Conference on Privacy, Security and Trust (PST), December 12-14, 2016, Auckland, New Zealand, International Program Committee.
- Global Identity Summit, September 19-24, 2016, Program Planning Committee.
- Global Identity Summit STEM Showcase, September 19-24, 2016, Organizing Committee, Chair.
- International Conference on Industrial, Engineering & Other Applications of Applied Intelligent System, August 2-4, 2016, Morioka, Japan, Program Committee.
- AAAI Conference on Artificial Intelligence (AAAI), 5th AAAI Workshop on Incentives and Trust in E-Communities (WIT-EC) 2016, February 12–17 2016, Phoenix, Arizona, International Program Committee.
- International Conference on Agents and Artificial Intelligence (ICAART), February 24-26, 2016, Rome Italy, International Program Committee.
- Global Identity Summit, September 14-16, 2015, Tampa, FL, Planning Committee.
- 28th International Conference on Industrial, Engineering & Other Applications of Applied Intelligent System, June 10-12, 2015, Seoul, Korea, Program Committee.
- 4th Workshop on Incentive and Trust in Electronic Communities, 29th AAAI Conference on Artificial Intelligence (AAAI), January 25–29, 2015, Austin Texas, Program Committee.
- International Conference on Agents and Artificial Intelligence (ICAART), January 10-12, 2015, Lisbon, Portugal, International Program Committee.
- IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT'14), August 11-14, 2014, Warsaw, Poland, Program Committee.
- ID360: Global Forum on Identity, April 9-10, 2014, Austin, TX, Chair, Organizing Committee.
- International Conference on Agents and Artificial Intelligence (ICAART), March 6-8, 2014, Angers, France, International Program Committee.
- International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems, June 17-21, 2013, The Netherlands, Program Committee.
- ID360: Global Forum on Identity, April 30 and May 1, 2013, Austin, TX, Chair, Organizing Committee.
- Trust Workshop, International Conference on Autonomous Agents and Multiagent Systems (AAMAS-2013), May 7, 2013, Minneapolis, MN, Organizing Committee.
- ID360: Global Forum on Identity, April 23-24, 2012, Austin, TX, Chair, Organizing Committee.
- Trust Workshop, International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS), June 4-8, 2012, Valencia, Spain, Organizing Committee.
- International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS), June 4-8, 2012, Valencia, Spain, Program Committee.
- International Conference on Agents and Artificial Intelligence, February 6-8, 2011, Vilamoura Algarve, Portugal, Program Committee.
- International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS 2011), Trust in Agent Societies Workshop, May 2, 2011, Taipei, Taiwan, Program Committee.
- International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS 2010), May 10, 2010, Toronto, Canada, Program Committee.
- Co-organizer and Program Committee, "Reputation and Trust Workshop, International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS 2010), Toronto, Canada, May 10, 2010, Program Committee.
- International Conference on Agents and Artificial Intelligence, Valencia, Spain, January 22-24, 2010, Program Committee.
- Third International Workshop on Massively Multi-Agent Systems: Models, Methods and Tools (MMAS'09), Budapest, Hungary, May 11 2009, Program Committee.
- Trust in Agent Societies Workshop, Autonomous Agents & Multi-Agent Systems (<u>AAMAS 2009</u>), Budapest, Hungary, May 11 2009, Co-organizer and Program Committee.

- International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS 2007), Lisbon, Portugal, Program Committee.
- Trust, Fraud and Deception Workshop, International Joint Conference on Autonomous Agents & Multi-Agent Systems Honolulu, Hawaii; 2007, Co-Organizer and Program Committee.
- IEEE/WIC/ACM International Joint Conference on Web Intelligence and Intelligent Agent Technology, (WI/IAT 2006), Hong Kong, China, December 2006, Program Committee.
- Programming Multi-Agent Systems (ProMAS), International Joint Conference on Autonomous Agents & Multi-Agent Systems, Hakodate, Japan, May 8-12, 2006, Program Committee.
- Defense Applications and Multi-Agent Systems Workshop, International Joint Conference on Autonomous Agents & Multi-Agent Systems, Hakodate, Japan, May 8-12, 2006, Program Committee.
- Trust, Fraud and Deception Workshop, International Joint Conference on Autonomous Agents & Multi-Agent Systems Hakodate, Japan, May 8-12, 2006, Co-Organizer and Program Committee.
- International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS 2006), Hakodate, Japan; May 8-12, 2006, Program Committee.
- IEEE Symposium on Multi-Agent Security and Survivability (MAS&S), Philadelphia, PA, August 30-31, 2005, Co-Chair.
- IEEE/WIC/ACM International Joint Conference on Web Intelligence and Intelligent Agent Technology Intelligent Agent Technology, (WI/IAT 2005), Compiègne University of Technology, France, September 19-22, 2005, Program Committee.
- Defense Applications and Multi-Agent Systems Workshop, International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS 2005), Utrecht, the Netherlands, July 25-29, 2005, Program Committee.
- Trust, Fraud and Deception Workshop, International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS 2005), Utrecht, the Netherlands, July 25-29, 2005, Co-Organizer and Program Committee.
- International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS 2005), Utrecht, the Netherlands, July 25-29, 2005, Program Committee.
- IEEE Symposium on Multi-Agent Security and Survivability (MAS&S), Philadelphia, PA, August 30-31, 2004, Program Committee.
- IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT 2004), Beijing, China, September 20-24, 2004, Program Committee.
- Workshop on Trust, Privacy, Deception and Fraud in Agent Societies, International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS 2004), New York City, New York, July 2004, Co-Organizer.
- Workshop on Multiagent Planning and Scheduling, International Conference on Automated Planning and Scheduling, Monterey, CA, June 6, 2005, Program Committee.
- International Joint Conference on Artificial Intelligence (IJCAI 2003), Acapulco, Mexico, July 2003, Program Committee.
- International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS 2003), Melbourne, Australia, July 2003, Program Committee.
- Workshop on Autonomy, Delegation, and Control: From Inter-agent to Organizations and Institutions, International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS 2003), Melbourne, Australia, July 2003, Program Committee.
- International Workshop on Computational Autonomy (AUTONOMY 2003), Melbourne, Australia, July 2003, Program Committee.
- Workshop on Resource, Role, and Task Allocation in Multi-Agent Systems, International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS 2003), Melbourne, Australia, July 2003, Program Committee.
- Workshop on Trust, Privacy, Deception and Fraud in Agent Societies, International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS 2003), Melbourne, Australia, July 2003, Program Committee.
- RoboCup 2002 Conference, Fukuoka, Japan and Busan, South Korea, together with the RoboCup soccer and rescue competitions, June 19-25, 2002, International Program Committee.
- International Workshop on Agents in Design (WAID2002), MIT, Cambridge, August 28-30 2002, Program Committee.
- Eighteenth National Conference on Artificial Intelligence (AAAI-2002), Workshop on Autonomy, Delegation, and Control: From Inter-agent to Groups, Edmonton, Alberta, Canada, July 28, 2002, Program Committee.

- International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS 2002), Workshop on Toward an Application Science: MAS Problem Spaces and Their Implications, Bologna, Italy from July 15 19, 2002, Organizing Committee.
- International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS 2002), Workshop on Deception, Fraud and Trust in Agent Societies, Bologna, Italy from July 15 19, 2002, Organizing Committee.
- International Joint Conference on Autonomous Agents & Multi-Agent Systems AAMAS 2002 (formerly AGENTS and ICMAS), Bologna, Italy from July 15 19, 2002, Program Committee.
- International Joint Conference on Artificial Intelligence (IJCAI 2001), Workshop on Artificial Intelligence and Manufacturing: New AI Paradigms for Manufacturing, Seattle, WA, August 5, 2001, Organizing Committee.
- International Joint Conference on Artificial Intelligence (IJCAI 2001), Autonomy, Delegation, and Control Workshop, Seattle, WA, August 2001, Program Committee.
- Second Asia-Pacific Conference on Intelligent Agent Technology (IAT'2001), Maebashi City, Japan, October 23-26, 2001, Program Committee.
- International Workshop on Agent Theories, Architectures, and Languages (ATAL-01), Seattle, WA, August 1-3, 2001, Program Committee.
- International Workshop for Fraud, Deception and Trust in Agent Societies, Autonomous Agents 2001, May 28, 2001, Montreal, Canada, Organizing Committee and Program Committee.
- International Conference on Autonomous Agents 2001, May 28-June 1, 2001, Montreal, Canada, Program Committee.
- International Workshop on Autonomy Oriented Computation (AOC), May 28, 2001, Montreal, Canada, Organizing Committee and Program Committee.
- International Workshop on Infrastructure for Agents, MAS, and Scalable Multi-Agent Systems, Autonomous Agents 2001, May 28, 2001, Montreal, Canada, Organizing Committee and Program Committee.
- The Fourteenth International Conference on Florida Artificial Intelligence Research Symposium (FLAIRS'01), Key West, FL., May 20–23, 2001, Program Committee.
- The Eleventh IFIP/IEEE International Workshop on Distributed Systems: Operations & Management (DSOM 2000), December 2000, Technical Program Committee and Session Chair.
- The Sixth International Conference on Intelligent Autonomous, Special Track for Multi-Agent Architectures for Intelligent Automation, Venice, Italy, July 25–27, 2000, Organizing Co-Chair.
- Pacific Rim International Conference on Artificial Intelligence (PRICAI), Workshop on Teams with Adjustable Autonomy, Melbourne, Australia, August 28–29, 2000, Organizing Committee.
- The Seventeenth National Conference on Artificial Intelligence (AAAI–2000), Intelligent Systems Demonstrations, Austin, TX., July 30 August 3, 2000, Organizing Committee.
- The Fourth International Conference on Autonomous Agents (Agents 2000), Infrastructure for Research-Grade MAS Construction Workshop, Barcelona, Catalonia, Spain, June 3 7, 2000, Organizing Committee.
- The Twelfth International Conference on Software Engineering and Knowledge Engineering (SEKE2000), Chicago, IL, July 6–8, 2000, Program Committee.
- The Seventh International Workshop on Agent Theories, Architectures, and Languages (ATAL-2000), Boston, MA., July 7–9, 2000, Program Committee.
- The Fourth International Conference on Multi-Agent Systems, Infrastructure for Research-Grade MAS Construction Workshop, July 7–12, 2000, Boston MA., USA, Organizing Committee.
- The Fourth International Conference on Autonomous Agents (Agents 2000), Barcelona, Catalonia, Spain, June 3 7, 2000, Program Committee.
- The Twenty-Second International Conference on Software Engineering (ICSE), Intelligent Software Engineering (ISE3) Workshop, Limerick, Ireland, June 4–11, 2000, Organizing Committee.
- The Thirteenth International Conference on Florida Artificial Intelligence Research Symposium (FLAIRS'00), Orlando, FL., May 2000, Program Committee.
- The Twelfth International Conference on Industrial and Engineering Applications of Artificial Intelligence and Expert Systems (IEA/AIE99), Workshop on Intelligent Agents for Electronic Commerce, May 31 June 3, 1999, Cairo, Egypt, Program Committee.

- The Twelfth Workshop on Knowledge Acquisition, Modeling and Management, KA for Requirements Engineering Track, October 16-21, 1999, Co-Chair.
- The Twelfth International Conference on Florida Artificial Intelligence Research Symposium (FLAIRS'99), Orlando, FL., May 1–5, 1999, Program Committee.
- ISADS99, The Fourth International Symposium on Autonomous Decentralized Systems, Emergent Approach session, Tokyo, Japan, March 21–23, 1999, Session Chair.
- International Conference on Agile, Intelligent and Computer-Integrated Manufacturing, Troy, NY, October 7–9, 1998, International Program Committee.
- Agent-Based Manufacturing Workshop, Autonomous Agents '98, Minneapolis, MN, May 9, 1998, Program Committee.
- AI and Manufacturing: State-of-the Art and State-of-the-Practice, AAAI SIGMAN (Special Interest Group in Manufacturing) Conference, Albuquerque, NM., August 31 September 2, 1998, Program Organizing Committee.
- The Eleventh International Conference on Industrial & Engineering Applications of Artificial Intelligence & Expert Systems (IEA/AIE-98), Benicassim, Castellon, Spain, June 1–4, 1998, Invited Session Organizer.
- 1997 IEEE International Conference on Robotics and Automation, Albuquerque, NM, April 20–25, 1997, Program Committee.
- Intelligent Systems Conference, Workshop on Semiotic Modeling for Sensible Agents, Gaithersburg, MD, October 23–25, 1996, Workshop Co-Chair (Co-Chair: Srini Ramaswamy).
- AAAI SIGMAN (American Association for Artificial Intelligence Special Interest Group in Manufacturing) Research Planning Workshop, Albuquerque, NM, April 24–26, 1996, Working Group Chair.
- National Institute of Standards and Technology Manufacturing Process Planning Workshop and CAME (Computer Aided Manufacturing Engineering) Forum Workshop, Gaithersburg, MD, June 10–11, 1996, Session Chair.
- The Second Internal Federation for Information Processing (IFIP 5.10) Workshop on Virtual Prototyping, "CAD and Virtual Prototyping," May 6, 1996, Panel Member.
- The Fourth National Conference on "Diversity in the Scientific and Technological Workforce," sponsored by The National Science Foundation, Electrical, Computer, and Solid-State Engineering, Washington, D.C., September 22, 1995, Panel Co-Facilitator (Co-Facilitator: Carmen Menoni).
- 1995 IEEE International Symposium on Intelligent Control (ISIC), Monterey, CA., August 27–29, 1995, Co-Program Chair.
- 1994 IEEE International Conference on Robotics and Automation, San Diego, CA., May 17–21, 1994, Technical Committee.
- 1994 IEEE International Conference on Systems, Man and Cybernetics, San Antonio, TX, October 2–5, 1994, Session Chair.
- Workshop on Education for Manufacturing 2002 sponsored by UT College of Engineering Manufacturing Steering Committee and Gulf-Southwest Section of American Society for Engineering Education, Austin, TX, May 12, 1994, Program Committee.
- The Automated Factory of the Future: Where Do We Go From Here? Workshop at the 1994 IEEE International Conference on Robotics and Automation, San Diego, CA., May 9, 1994, Co-Chairperson (Co-Chairperson: Dr. Eric Mettala).
- Intelligent Manufacturing Workshop, American Association for Artificial Intelligence Conference conducted July 11, 1993, Invited Program Committee.

External Advisory Committees and Boards

- Advisory Board, Computer Science Department, Concordia University, 2013 present.
- Privacy and Security Committee, Pecan Street Consortium, Co-Chair.
- Metroplex Technology Business Council, 2008 2012, Cloud Security Committee.
- Center for Applied Identity Management Research (CAIMR), 2008 2010, Research Planning Committee.
- Center for Applied Identity Management Research (CAIMR), 2008 2010, Membership Committee.
- SEMATECH, 1997 2000, Factory Integration Technical Working Group.
- National Center for Manufacturing Sciences, 1993 1995, Factory Controls Tactical Action Committee.

Professional Society Committees

- IEEE Technical Council on Software Engineering, 1995 present.
- American Association for Artificial Intelligence Special Interest Group in Manufacturing, Academic Co-Chair.

Editorial Boards

- International Journal of Agent Technologies and Systems, Editorial Board, 2010 present.
- Journal of Database Management, Editorial Review Board, 2001- present.
- Journal of Experimental and Theoretical Artificial Intelligence, Special Issue: Agent-based Systems and Autonomy Control Software, 1999.
- Journal of Intelligent Automation and Soft Computing (IASC), Special Issue Editor, 1996.

PROFESSIONAL SERVICE ACTIVITIES:

Book Reviews

- Review for book titled "Trust in E-Services: Technologies, Practices and Challenges," publishers Idea Group, 2006.
- Review for the 2000 PRICAI Post-proceedings, Springer LNAI volume, Reviewer 2001.
- Review for Pearson Education (the company formed as a result of the merger between Addison-Wesley Longman and Prentice Hall) of the book titled Compositional Design of Intelligent Agent Systems by Frances Brazier, Catholijn Jonker and Jan Treur, 2001.
- PRICAI Workshop Reader of Agent-based Software Teams with Adjustable Autonomy, Post-Proceedings of the Pacific Rim International Conference on Artificial Intelligence (PRICAI 2000), Springer LNAI volume, 2001.

Journal Reviews

- International Journal of Information Privacy, Security and Integrity (IJIPSI), Reviewer, 2019 present.
- ACM Transactions on Intelligent Systems and Technology, Guest Editor in 2014, 2010 present.
- Journal of Artificial Intelligence Research, 2010 present.
- Journal of Applied Artificial Intelligence, Reviewer, 2003 present.
- Journal of Autonomous Agents and Multi-Agent Systems, Reviewer, 2002 present.
- IEEE Systems, Man and Cybernetics, 2002 present.
- IEEE Computer, Review, 2001 present.
- Journal of Intelligent Information Systems, Reviewer, 1997 present.
- ACM Transactions on Internet Technology, 2015.
- Encyclopedia of Software Engineering, 2010 2016.
- Knowledge Engineering Review, Reviewer, 2005 2016.
- International Journal on Integrated Computer-Aided Engineering, Reviewer, 2005 2016.
- Journal of Software Maintenance and Evolution, Reviewer, 2005 2016.
- Journal of Software Practice and Experience, Reviewer, 2002 2016.
- International Journal on Knowledge and Information Systems (KAIS), Reviewer, 2001 2016.
- IEEE Transactions on Software Engineering, Reviewer, 2001 2016.
- Journal of Production Planning and Control, Reviewer, 1998 2016
- Journal of Manufacturing Systems, Reviewer, 1997 2016.
- Requirements Engineering Journal, Reviewer, 2002.
- Journal of Artificial Intelligence in Engineering Design and Manufacturing (AIEDAM), Special Issue: on New AI Paradigms for Manufacturing, Reviewer, 2002.
- Journal of Integrated Computer-Aided Engineering, Reviewer, 2002, 1998 1999
- IEEE Transactions on Knowledge and Data Engineering (TKDE), Reviewer, 2001.

- International Journal on Artificial Intelligence Tools (IJAIT), Reviewer, December 2000 Special Issue.
- IEEE Transactions on Automation and Robotics, Reviewer, 1997.
- Journal of Engineering Education, 1996.

SELECTED INVITED TALKS:

- "The TrustLab: Scoring Trust in Social Media," SWRI, online, August 6, 2020.
- "Identity in 5G," U.S. Telecom Partners, online, March 2, 2020.
- "Biometric Systems Requirements for the Future," Office of Biometric Identity Management, Department of Homeland Security, Washington, DC, February 5, 2020.
- "Trust is the Offense and Defense," CIA and ODNI, Austin, TX, February 12, 2020.
- "Identity 2040," International meeting hosted by the National Office of Identity Data, The Hague, Netherlands, December 1-2, 2019.
- The "Preparing for the Next Cyber Attack: Securing Agency Posturing," CyberSmart: Preparedness and Proactive Threat Response, Austin, TX, April 2, 2019.
- "Identity Leadership," Identity Theft Resource Center Coalition, Austin, TX, March 4-5, 2019
- "Privacy and Humanity: Terms and Condition May Apply," SXSW, Austin, TX, March 13, 2019.
- "ResearchMatch," Generali Global Assist, Austin, TX, March 12, 2019
- "UT CID Privacy Check," FIDO Alliance Privacy Workshop, Austin, TX, January 30, 2019.
- "Identity Asset Valuation," FIDO Alliance Conference, Austin, TX, January 28, 2019.
- "Future of Identity," CIA and ODNI, Austin TX, January 23, 2019.
- <u>"Identity Access Management: The Keys to the Kingdom," Texas Association of State Systems for Computing and Communications, Austin, TX, December 14, 2018.</u>
- "Investigating Identity Theft" Minnesota DPA Training Session (Minneapolis, MN), November 12, 2018
- "Trusted Identity," Digital Futures, Austin, TX, October 16, 2019.
- "Identity and CyberSecurity for State Agencies," Texas Cybersummit, San Antonio, TX, October 13, 2018
- "Identity and Tax Fraud," Identity Theft Tax Refund Fraud & Information Sharing and Analysis Center (IDTTRF ISAC), Austin TX, May 3, 2018.
- "Identity Science," CIA Office of Science and Technology, Austin TX, February 26, 2018.
- "Fraud Detection and Modern Day Identity Construction," Digital Futures, Austin TX, November 16, 2017.
- "Risk, Security, & Privacy," TTI/Vanguard, Washington DC September 12, 2017.
- "ID360 Scorecard Best Practices Measurement," CompTIA, Austin TX, May 9, 2017.
- "Data Breach Notification," Department of Homeland Security, Washington DC, February 21, 2017.
- "Finding Trusted Sources for BioSurveillance," Defense Threat Reduction Agency, Washington DC, February 14, 2017.
- "Trust Filtering in Social Media," Defense Innovation Summit, Austin Texas, November 29, 2016.
- "Identity Protection and Breach Response," Lifelock, Austin Texas, November 17, 2016.
- "The Identity Ecosystem," Digital Futures, Austin Texas, November 8, 2016.
- "The Insider Threat," JTFN, Washington DC, October 25, 2016.
- "Identity as an Asset Business case for Identity Management Investments," Global Identity Summit, Tampa Florida, September 22, 2016.
- "Identity Workforce Education," Global Identity Summit, Tampa Florida, September 21, 2016.
- "Identity Intelligence," CIA Digital Futures, Austin, TX, August 12, 2016
- "Identity Management Measurement and Evaluation," LCRA, Austin, TX, June 28, 2016.
- "Belief in Identity," FBI, Austin, TX, May 24, 2016.
- "Trust in Social Media," Defense Threat Reduction Agency, Washington DC, May 10, 2016.

- "Consumer Identity Management and Biometrics," Office of Biometrics and Identity Management, Austin, TX, May 12, 2016.
- "Identity and Cybersecurity National Action Plan," U.S. Congressional Committee on Cybersecurity, Washington DC, April 20, 2016.
- "Researching How to Construct, Protect, and Detect Trusted Identities," National Security Agency Innovation Forum, Washington, D.C., March 29, 2016.
- "Identity and Security," NSA Innovation Event: Federal Labs Technology Demonstrations and Discussions, Hyattsville, Maryland, March 30, 2016.
- "Identity and Homeland Security," Office of Biometrics and Identity Management, Washington DC, February 10, 2016.
- "Surety BioEvent Application," Biosurveillance Ecosystem and Analytic Application Technical Interchange Meeting, Falls Church, Virginia, February 8, 2016.
- "The Medical Privacy Paradox," A Symposium on Cybersecurity and Privacy, Texas Tribune, San Antonio, Texas, December 9, 2015.
- "The Identity Liabilities in Social Media," U.S. Veterans Affairs, October 28, 2015.
- "Identity Value and Risks: for you and your organization," Innotech, Austin, Texas, October 8, 2015.
- "Identity Value and Risks," North American Risk Executive Council, Austin, Texas, October 5, 2015.
- "The Emerging Identity Workforce," Global Identity Summit, Tampa Florida, September 22, 2015.
- "Learning from the Criminal: Processes and Patterns of Identity Crimes," *Global Identity Summit*, Tampa, FL, September 23, 2015.
- "Who should I buy from? Identity management and security scorecards", ID360: Global Forum on Identity, Austin TX, May 5, 2015.
- "Modeling and Analysis of Identity Threat Behaviors Through Text Mining of Identity Theft Stories," *IEEE Joint Intelligence and Security Informatics Conference (JISI)*, the Hague, the Netherlands, September 24-26, 2014.
- "Trustworthiness of Identity Attributes," *ACM* 7th *International Conference on Security of Information and Networks*, Glasgow, Scotland, UK, Sept. 9-11, 2014.
- "Identity Value and Risks: for you and your organization," National Association of Convenience and Fuel Retailing, Austin, TX, August 18, 2015.
- "Vital Statistics Vital to Citizen Identity Protection," New York City Department of Vital Records, June 7, 2015.
- "Protect and Secure: Defending Vital Records Through Innovative Methods" Plenary Address, NAPHSIS's 2015 NAPHSIS Meeting, Pittsburg, PA, June 2, 2015.
- "Building a Global Firewall" Panel, The University of Texas System's Chancellor's Council Annual Meeting, Austin, TX, May 8, 2015.
- "Cybersecurity" Texas Bankers Association 131st Annual Convention and Exposition, Austin TX, April 17, 2015.
- "A Walk through the Identity Ecosystem in 3D," SXSW, Austin, TX, March 14, 2015.
- "Managing and Protecting your Personal and Business Identity," Osher Lifelong Learning Institute's UT NOVA Lecture Series, Austin, TX April 1, 2015.
- "Identity & Privacy: The Need for Texas Citizens and Businesses," Identity and Security Legislative Briefing, Texas Capitol, Austin, TX, February 16, 2015.
- "Identity Risks and Values over a Lifetime," Keynote at 60th Annual Conference on Vital Statistics hosted by the Department of State Health Services, Austin, TX, December 10, 2014.
- "Identity Management, Privacy, and Security," TechAmerica National State Government Affairs Committee Meeting, Austin, TX, November 14, 2014.
- "Developing the Next Big Thing in Security" Panel, Bloomberg Government's The Digital Trust Event, Austin, TX, October 21, 2014.
- "Managing and Protecting your Personal and Business Identity," Metropolitan Breakfast Club's Monthly Featured Speaker, Austin, TX, October 15, 2014.
- "Identity, Privacy, and the Internet: Q&A with Dr. Suzanne Barber." PBS Nova Labs, Webinar, October 14, 2014.
- "Privacy & Security" Panel, Austin Tecnology Council's Texas Big Data Conference, Austin, TX, September 26, 2014.
- "Future of Identity," Global Identity Summit, Tampa, FL, September 18, 2014.

- "Identity Intelligence and Security," Biometrics, Identity and Security Workshop, Global Identity Summit, Tampa, FL, September 16, 2014.
- "Identity Intelligence," Conference on the National Defense and Intelligence, June 16, 2014, Charlottesville, VA.
- "Identity Risks and Values over a Lifecycle You might be surprised," ID360: Global Forum on Identity, Austin, TX, April 9, 2014.
- "The Multiple Dimensions of Online Trust," invited keynote at AAAI Spring Symposium, Stanford, CA, March 26, 2014.
- "Identity and Security," Deloitte Cybersecurity Forum, Austin, TX, February 19, 2014.
- "Building Trusted Identities," Visa Security Summit, Washington, D.C., October 2, 2013.
- "Identity Crimes Vulnerabilities and Consequences in the Identity Ecosystem," US Secret Service Cyber Forensics Training, Austin, Texas, August 28, 2013.
- "Identity Threats Risks and Values," FBI Law Enforcement Executive Development Association (LEEDA) Training, Austin, Texas, August 26, 2013.
- "Best Practices Business Processes for Secure Identity Management," U.S. Army Operational Test Command, Fort Hood, Texas, August 12, 2013.
- "Cyber Identity Threat Assessments and Risks," ID360: The Global Forum on Identity, Austin, Texas, April 30, 2013.
- "Recommendations for Biometric Security and Privacy," DHS Data Privacy and Integrity Advisory Committee, October 2, 2013.
- "Identity Management, Security and Privacy," Verizon, Austin, Texas, July 19, 2013.
- "Cybersecurity Threats," U.S. Army, Austin, Texas, July 12, 2013.
- "Identity Security and Privacy in the Smart Grid," Pecan Street Quarterly meeting, Austin, Texas, February 7, 2013.
- "Identity Crimes," US Secret Service, Austin, Texas January 30, 2013.
- "Center for Identity Ecosystem," Lucena, Austin Texas, September 28, 2012.
- "Identity Attributes and Threats," U.S. Department of Justice, Deputy Chief for Strategy and Policy, Washington, DC, August 16, 2012.
- "Mapping of the Identity Ecosystem Identity Value and Risks," Department of Defense Chief Information Office, Washington, DC, August 15, 2012.
- "Identity Security and Privacy," Department of Treasury, Washington, DC, July 15, 2012.
- "Identity Threats Assessment and Prediction," US Secret Service, Washington, DC, July 17, 2012.
- "Technology for Identity Privacy and Integrity," Department of Homeland Security Chief Privacy Office, Washington, DC, June 12, 2012.
- "Protecting the Identity of Children," Austin, TX, April 25, 2012.
- "Mapping the Identity Ecosystem," ID360, Austin, TX, April 23, 2012.
- "No Rainy Days: Identity and Security in the Cloud," SXSW, Austin, TX, March 11, 2012.
- "Identity and Security," Privacy Day, Center for Identity, Austin, TX, February 1, 2012.
- "Digital Persona Protection," Department of Treasury, Washington, DC, January 26, 2012.
- "Identity: A New Asset Class," U.S. Department of Veteran Affairs Headquarters, Washington, DC, January 25, 2012.
- "Digital Persona Protection," Department of Defense, Office of the Inspector General, Washington, DC, December 5, 2011.
- "Digital Persona Protection," Office of Secretary of Defense, Pentagon, Washington, DC, July 11, 2011.
- "Identity, Privacy, and Security," The University of Texas, October 28, 2011.
- "Identity and Security," Freescale, Austin, TX, October 17, 2011.
- "Digital Persona Protection," Federal Cybersecurity Conference and Workshop, Washington, DC, October 4, 2011.
- "Identity Protection and Security," Texas Legislative staff, Austin, TX, September 2, 2011.
- "Trusting Virtual Footprints," International Conference on Autonomous Agents and Multi-agent Systems (AAMAS 2010), Toronto, Canada, May10, 2010.
- "Confronting Identity Management Challenges Through Applied Research," Computer Security Institute (CSI) 2009, National Harbor, Maryland, October 27, 2009.

- "Software Engineering for Identity Management Systems," CAIMR research planning workshop, Washington, DC. November 2-4, 2009.
- "Software Engineering at The University of Texas," Deloitte, EDGE Center, Austin, TX, December 10, 2009.
- "Software Engineering for Systems of Systems Testing and Deployment," Operational Test Command, Fort Hood Texas, January 4, 2010.
- "Excellence in Distributed Global Environments: Software Engineering supported by Models, Methods and Tools" Modeling and Simulation Coordination Office (MSCO), Washington, DC, January 20, 2010.
- "Software Engineering for Quality Lifecycle," International Test and Evaluation Association, January 21, 2010.
- "Software Engineering for Systems of Systems Testing and Deployment," Operational Test Command, Fort Hood Texas, February 2, 2010.
- "Quality Assurance for Rapid Development," Immersive Technology, Austin, TX, February 19, 2010.
- "Software Engineering for Trusted Computing," AMD, April 7, 2010.
- "Identity Models for Risk Assessment," Identity Management Summit, Austin, TX, May 25, 2010.
- "Software Engineering for Quality Identity Management Systems," Veterans Affairs, Washington, DC. June 3, 2010.
- "Veteran Identity Characterization and Fraud Detection," Veterans Affairs, Washington, DC. June 3, 2010.

ADVISING/MENTORING

Advisor and Mentor

- Software Engineering Prequalifying Committee, 2010 present.
- Faculty Advisor, Software Engineering Executive M.S. (Option III) Degree Program, September 2002 August 2015.
- Faculty Advisor, Electrical and Computer Engineering, September 1992 present.
- Faculty mentor for Sarfraz Khurshid, 2006 2010.
- Faculty mentor for Christine Julien, 2006 2010.

STUDENTS SUPERVISED FOR THESES AND DISSERTATIONS:

Ph.D. Supervision and Committees

- Wenting Song, Electrical and Computer Engineering, Ph.D. Supervisor, in-progress.
- Chengjing Li, Electrical and Computer Engineering, Ph.D. Supervisor, in-progress.
- Teng-Chieh Huang, Electrical and Computer Engineering, Ph.D. Supervisor, in-progress.
- Kai Chih Chang, Electrical and Computer Engineering, Ph.D. Supervisor, in-progress.
- David Liau, Electrical and Computer Engineering, Ph.D. Supervisor, in-progress, defense planned Fall 2020.
- Muhummad Usman, Electrical and Computer Engineering, PhD Committee member, 2020 present.
- Michael Leggatt, Electrical and Computer Engineering. PhD Committee, 2017.
- Yuqun Zhang, Electrical and Computer Engineering, PhD Committee, Fall 2016.
- Johnathan David Moseley, Electrical and Computer Engineering, PhD Committee, Fall 2015.
- Brian Soeder, "Towards A Greater Confidence in Identity," Electrical and Computer Engineering Department, Software Engineering Area, Ph.D. Supervisor, Spring 2015.
- Aibo Tran, "Automatic Data Integration with Generalized Mapping Definitions," PhD Committee, Summer 2014.
- Meiru Chu, "Managing Architectural Design Decision Documentation and Evolution," PhD Committee, Summer 2014.
- Suratna Budalakoti, "Recommending Experts in Question and Answer Forums," Electrical and Computer Engineering Department, Software Engineering Area, Ph.D. Supervisor, Spring 2013.

- David Han, "Action Selection and Coordination for Autonomous Agents conducting UAV Surveillance," Electrical and Computer Engineering Department, Computer Engineering Area, Ph.D. Supervisor, Fall 2011.
- Dave DeAngelis, "Motivating Experts in Distributed Networked Systems," Electrical and Computer Engineering Department, Software Engineering Area, Ph.D. Supervisor, Fall 2011.
- Christopher Jones, "Robust Coalition Formation in a Dynamic, Contractless Environment," Electrical and Computer Engineering, Software Engineering Area, Ph.D. Supervisor, Fall 2009.
- Jaesuk Ahn, "Attitude-driven Coordination and Collaboration in Agent-based Systems," Electrical and Computer Engineering, Software Engineering Area, Ph.D. Supervisor, Summer 2009.
- Karen Fullam, "Trustworthiness Assessments of Data and Sources in Distributed Systems," Electrical and Computer Engineering, Software Engineering Area, Ph.D. Supervisor, Summer 2006.
- Jisun Park, "Information Sharing Networks," Electrical and Computer Engineering, Software Engineering Area, Ph.D. Supervisor, Summer 2006.
- Dung Lam, "Program Comprehension for Multi-Agent System Software," Electrical and Computer Engineering, Software Engineering Area, Ph.D. Supervisor, Fall 2005.
- Joon Woo Kim, "Trust and Reputation in Distributed Systems," Electrical and Computer Engineering Department, Manufacturing Systems Engineering Area, Ph.D. Supervisor, Fall 2003.
- Jim Holt, "Software Engineering Methods and Tools for Architecture Simulation and Evaluation," Electrical and Computer Engineering Department, Computer Engineering Area, Ph.D. Supervisor, Spring 2003.
- Anuj Goel, "Planning in Multi-Agent Systems," Electrical and Computer Engineering Department, Computer Engineering Area, Ph.D. Supervisor, December 2002.
- Thomas Graser, "Reference Architecture Representation Environment (RARE): Systematic Derivation and Evaluation of Domain Specific, Implementation Independent Software Architectures," Electrical and Computer Engineering Department, Computer Engineering Area, Ph.D. Supervisor, May 2001.
- Cheryl Martin, "Adaptive Decision Making Frameworks in Multi-Agent Systems," Electrical and Computer Engineering Department, Computer Engineering Area, Ph.D. Supervisor, May 2001.
- "Jason" Tse-Hsin Liu, "Conflict Resolution in Multiple Agent based Planning Systems," Electrical and Computer Engineering Department, Computer Engineering Area, Ph.D. Supervisor, May 2000.
- Stephen Jernigan, "Heterogeneous Knowledge Representations to Support Domain Modeling in the Software Engineering Development Process," Electrical and Computer Engineering Department, Computer Engineering Area, Ph.D. Supervisor, June 2000.
- Chinh Nguyen Tran, "An Automatic Test Generation System for Testing Virtual Memory Operations," Electrical and Computer Engineering Department, Computer Engineering Area, January 1999.
- Joseph Bradley, "A Software Architecture for Automated Information Visualization," Electrical and Computer Engineering Department, Computer Engineering Area, Ph.D. Supervisor, August 1996.

M.S. Theses and Report:

- Aditya Tyagi, Electrical and Computer Engineering, (in progress)
- Chia-Ju Chen, Electrical and Computer Engineering, Fall 2019, (supervisor).
- Rima Rana, Electrical and Computer Engineering, Spring 2019, (supervisor).
- Ken Meiser, School of Information, Spring 2018, (supervisor).
- Haowei Sun, Electrical and Computer Engineering, Spring 2018, (supervisor).
- Guangyu Lin, Electrical and Computer Engineering, Fall 2017, (supervisor).
- Abe Arredondo, Electrical and Computer, Engineering, Fall 2017, (supervisor).
- Michael George, School of Information, Fall 2017, (supervisor).
- Misty Vasquez, School of Information, Fall 2017, (supervisor).
- Nitsuh Asfaw Tesfaye, Electrical and Computer, Engineering, Spring 2017 (supervisor).
- Luis Eduardo Stolk, Electrical and Computer, Engineering, Spring 2017 (supervisor).
- Jon Beverly, Electrical and Computer Engineering, Spring 2017 (supervisor).
- Vedhapriya Raman, Electrical and Computer Engineering, Spring 2017 (supervisor).

- Adam Whipple, Electrical and Computer, Engineering, Spring 2017 (reader).
- Abhibroto Mukherjee, Electrical and Computer Engineering, Spring 2017 (reader).
- Nitsuh Asfaw Tesfaye, Electrical and Computer, Engineering, Spring 2017.
- Jon Beverly, Electrical and Computer Engineering, Spring 2017.
- Vedhapriya Raman, Electrical and Computer Engineering, Spring 2017.
- Adam Whipple, Electrical and Computer, Engineering, Spring 2017.
- Abhibroto Mukherjee, Electrical and Computer Engineering, Spring 2017.
- Guangyu Lin, Electrical and Computer Engineering, Fall 2016.
- Tim Lambert, "Enterprise Product Platform Security Threat Vectors and Best Practices," Fall 2016.
- Luis Stolk, "Mobile Peers Notification System," Spring 2017.
- Doug Gunter, "Software Testing," Spring 2016.
- Marihebert Leal Vasquez, "Design and Implementation of a Software Framework to Model and Simulate Engineering Systems using BondGraphs," Spring 2016.
- Olamide T Kolawole, "Classification of Memes," ECE, Spring 2016.
- Julie Lebo, "Requirements Methodology for R&D Organization," ECE, Spring 2016.
- Cyril Joes, "Inquest: Predictive Analysis on Perceptible Information to Affirm User Identity on Personal Mobile Devices," /ECE, Fall 2015.
- Sarvesh Nagarajan, "Automated Test Input Generation and Test Execution for Websites," ECE, Fall 2015.
- Walter Scarborough, "Detecting Software Architecture Deviations in Development Workflows," ECE, Fall 2015.
- Monisha Manoharan, "Automated Mining of Social Data for Identity Threats," CS, Spring 2015.
- Jeffrey Pinkston, "Requirements and Solution Design for Services-related Software Implementations," ECE, Spring 2015.
- Liang Zhu, "Specialization in the Identity Ecosystem," ECE, Fall 2014.
- Luis Lopez-Cabanas, "Software Architectures and Design," ECE, Fall 2014.
- Yongpeng Yang, "Mining of Identity Theft Stories to Model and Assess Identity Threat Behaviors," ECE, Spring 2014.
- Jennifer Brenner, "One Step Ahead, Not Two Steps Behind: The Fight to Save Our Identities," ECE, Spring 2014.
- Kaveri Govindan, "Cloud Care: Application for Smart Personal Health Care Devices," ECE, Spring 2014.
- Shayani Deb, "Identity Risks and Value," ECE, Spring 2014.
- Anindita Das, "Intelligent, Remote-Controlled Home Protection System," ECE, Fall 2013.
- Marty Henderson, "Voice Recognition," Spring 2013.
- Ryan Golden, "NewsFerret: Supporting Identity Risk Identification and Analysis Through Text Mining of News Stories," Spring 2013.
- Nancy Stokes, "Mobile Electronic Dispensary System," Fall 2012.
- Scott Collier, "Dashboard for Semiconductor Manufacturing," Fall 2012.
- Bruce Zabada, "Removable Media for Software Engineering," Electrical and Computer Engineering Department, Software Engineering Area, Fall 2010.
- Miquel Otero, Rationale Management as the Basis of Knowledge Preservation for Enterprise Systems Value Added Resellers," Fall 2010.
- Robert Nadon, "Traceable Lifecycle Model," Electrical and Computer Engineering Department, Software Engineering Area, Fall 2010.
- Michael Willis, "The Role of Software Engineering Process in Research & Development and Prototyping Organizations, Summer 2009.
- Ryan Brown, "Inertial Solution for Accurately Assessing location Coordinates (ISAAC)," Electrical and Computer Engineering Department, Software Engineering Area, Fall 2009.
- Solomon Rugunda, "Mobile Application Development in Africa," Electrical and Computer Engineering Department, Software Engineering Area, Summer 2009.

- Ecleamus Ricks, "Using NI Requirements Gateway to Manage Requirements," Electrical and Computer Engineering Department, Software Engineering Area, Fall 2009.
- Rajiv Kadaba, "Modeling Virtual Footprints," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2009.
- Phil Hallenbeck, "Strategic Extensions to the Cost Benefit Analysis Method," Electrical and Computer Engineering Department, Software Engineering Area, Spring 2009.
- Brian Soeder, "An Analysis of Architectural Tools and Methods employed by the US Army," Electrical and Computer Engineering Department, Software Engineering Area, Summer 2009.
- Paul Taylor, "Implementing Software Architecture Practices in a new environment," Electrical and Computer Engineering Department, Software Engineering, Summer 2009.
- Michael Bockus, "Improving the software development process by integrating existing tools into Eclipse," Electrical and Computer Engineering Department, Computer Engineering Area, Summer 2008.
- Hasrat Godil, "Evaluating Expertise on the Internet," Electrical and Computer Engineering Department, Computer Engineering Area, Summer 2006.
- Dave DeAngelis, "Trust and Security in Distributed Systems," Electrical and Computer Engineering Department, Computer Engineering Area, Summer 2006.
- Marcelo Vanzin, "Finding Partner in Distributed Information Sharing Networks," Electrical and Computer Engineering Department, Computer Engineering Area, Spring 2005.
- Nishit Gujral, "Information Valuation," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2004.
- Jaesuk Ahn, "Software Architecture Derivation and Tools," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2004.
- William Barnes, "Independent Systems Operation/Regional Transmission Organization Software Systems and Service-Oriented Software Architecture," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2004.
- Bryan Nealer, "Software Engineering for Electronic Voting Systems," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2004.
- Linardi Reza, "Software Engineering for Semiconductor Manufacturing Process Systems," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2004.
- Abdelilah Elkhadiri, "Software Engineering for Systems Management and Restaurant Technology," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2004.
- Leith Shabbot, "Software Architectures and Standards," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2004.
- Dean Truong, "Software Engineering Review," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2004.
- Margot Casey, "Methods for Determining Optimal Test Sets based on Customer Requirements," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2004.
- Jonathan Thayer, "Multi-Agent Systems Implementations," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2004.
- David Walls, "Intelligent Agent in Hydraulic Intensifer," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2004.
- Karen Fullam, "Trust Policies for Information Valuation," Electrical and Computer Engineering Department, Computer Engineering Area, Spring 2004.
- Krishna Balaji, "Requirements Modeling," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2003.
- Nadeem Eleyan, "Software Patterns," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2003.
- Iris Mok, "Software Architecture Derivation," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2003.

- Roger Borchers, "Software Management and Maintenance," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2003.
- Matthew MacMahon, "Coordination among Agent-based Systems," Electrical and Computer Engineering Department, Computer Engineering Area, Spring 2003.
- Austin Bingham, "Software Engineering Methods and Tools for System Design," Electrical and Computer Engineering Department, Computer Engineering Area, Spring 2002.
- Dung Lam, "Design of Agent-based Systems," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2001.
- Anitha Lakshmanan, "Functional Requirements Specifications derived from Domain Models," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2001.
- Rafael Cabezas, "SGML: Conceptualization, Design and Implementation," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2001.
- Derek Saldana, "SGML Review," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2000.
- Morris E. Albers, II, "Configuration Management of System Engineering Process Activities (SEPA) Artifacts," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2000.
- Sutirtha Bhattachara, "Software Component Reuse Evaluation for System Design and Integration," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 2000.
- Vijay George, "Software Engineering: Project Management Application," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 1999.
- Nate Forman, "Metaclass-based Software Patter Implementation," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 1999.
- William Forbes, "Semantic Abstraction in Application Programming Interfaces through Domain Modeling," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 1999.
- Michael J. Lee, "E Commerce: How does it work," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 1999.
- Haidong Li, "Representation of Application Specific Requirements and Architectures for Complex Systems," Electrical and Computer Engineering Department, Computer Engineering Area, Spring 1999.
- David Han, "Coordinated Agent Problem Solving Design: Technique Selection through Roles," Electrical and Computer Engineering Department, Computer Engineering Area, Spring 1999.
- Bertrand B. Chiu, "Interactive Transformation of 2D Line Sketches to 3D Wireframe Models," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 1998.
- Ron Fries, "Recognition of Pitch, Amplitude and Duration of Notes in Recorded Sound," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 1998.
- Mary Orcutt, "Java Version Control Application Programming Interface," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 1998.
- Eric Nassar Robertson, "Domain Specific Meta Programming Tool," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 1998.
- MinChuan Wang, "Improve Legacy Software Using Modern Software Technologies," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 1998.
- Eric Cole, "Software Engineering Review," Electrical and Computer Engineering Department, Computer Engineering Area, Spring 1998.
- Keith Remlinger, "Simulation Waveform Editor," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 1998.
- Mike Tarasyuk, "Dynamic Graphical Representation of a Sensible Agent," Electrical and Computer Engineering Department, Software Engineering Area, Fall 1998.
- Glen Wilson, "A Requirements Analysis for System Modeling Environment," Electrical and Computer Engineering Department, Software Engineering Area, Fall 1997.
- Leigh Williamson, "A Comparison of Software Architectures," Electrical and Computer Engineering Department, Software Engineering Area, Fall 1997.

- Jeffrey Coleman, "Internet Based Client-Server Information System," Electrical and Computer Engineering Department, Software Engineering Area, Fall 1997.
- Judy Lanoux, "Instructional System Design for Distance Education, Electrical and Computer Engineering Department, Software Engineering Area, Fall 1997.
- Mabel Willy, "Design Metrics: An Overview Case Study," Electrical and Computer Engineering Department, Software Engineering Area, Fall 1997.
- Willie Adams, "A Survey of Software Quality Improvement Techniques," Electrical and Computer Engineering Department, Software Engineering Area, Fall 1997.
- Ashley Rosilier Campbell, "Motivating Developers Towards Software Process Management," Electrical and Computer Engineering Department, Software Engineering Area, Fall 1997.
- Melissa White, "Software Configuration Management," Electrical and Computer Engineering Department, Computer Engineering Area, Spring 1998.
- Cheryl Martin, "Representing Autonomy in Sensible Agent-based Systems," Electrical and Computer Engineering Department, Computer Engineering Area, Summer 1997.
- Anuj Goel, "Representation and Classification of Agent Architectures," Electrical and Computer Engineering Department, Computer Engineering Area, Summer 1997.
- Chris Chuter, "Agent-based Virtual Environments for Manufacturing Applications," Electrical and Computer Engineering Department, Computer Engineering Area, Spring 1997.
- Thomas Graser, "Reference Architecture Representation Environment (RARE)," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 1996.
- Anitha Chary Suraj, "Extended Statecharts for Systems Modeling, Specification and Verification," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 1996.
- Stephen Jernigan, "Distributed Search Method for Scheduling Flow Through a Factory Floor," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 1995.
- Matthew Powers, "Component for a Visual Tracking System with Active Gaze Control," Electrical and Computer Engineering Department, Computer Engineering Area, Spring 1995.
- Bernard Barcio, "State Machines for an Object-Oriented, Concurrent, Hierarchical Engineering Specification," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 1994.
- Arun Swaminathan, "APE: An Experience-based Assembly Sequence Planner for Mechanical Assemblies," Electrical and Computer Engineering Department, Computer Engineering Area, Summer 1994.

Postdoctoral Fellow Supervision

- Razieh Nokhbeh Zaeem, Ph.D., The University of Texas at Austin, July 2014 2016.
- Roger Andrew Maloney, PhD., The University of New Mexico, July 2014 March 2016
- Joe McGlynn, PhD, The University of Texas, January 2014 October 2015.
- Elizabeth Goins, PhD, The University of Texas, September 2013 October 2015.
- Muhammad Zubair Malik, Ph.D., The University of Texas at Austin, July-August 2014
- Thomas Graser, Ph.D., The University of Texas, June 2001 December 2004.
- Srini Ramaswamy, Ph.D., The University of Southwestern Louisiana, August 1994 June 1995.

Research Scientist Supervision

- Razieh Nokhbeh Zaeem, Ph.D., The University of Texas at Austin, 2016 present
- James Zaiss, Ph.D., University of California at Irvine, Fall 2019.

Visiting Research Fellow

• Srini Ramaswamy, Assistant Professor, School of Computer and Applied Sciences, Georgia Southwestern State University, June 1996 – August 1996.

Graduate Student Sponsorship

- Ethan Baer, "Trust Valuations in Social Media," Spring 2015 Fall 2015.
- Juan Diego Rodriguez, ICES graduate student, 2015-2016.
- Muhammad Zubair Malik (funded GRA, Sarfraz Khurshid is supervisor), 2013-2014.
- Kate McArdle, ECE (funded GRA), 2012-2013.
- Muhibur Rasheed, CS (funded GRA, Chandra Bajaj is supervisor), Summer 2012

Undergraduate Research Supervision

- Aditya Tyagi, "Predicting Data Breaches," 2020.
- Sohaib Khan, "Privacy by Design," 2020.
- Turan Z Vural, "PrivacyCheck", 2019
- Emma Niu, "Identity Ecosystem," 2017-2018.
- Malek Al Sukhni, Grant Guglielmo, Altamshali Hirani, Dylan Keeton, Sana Khateeb, Safa Mohammed, "PrivacyCheck Advances," Fall 2017 Spring 2018.
- Joseph Bae, "Identity Threat Assessment and Prediction," Summer 2017.
- Vibhu Appalaraju, "Identity Threat Assessment and Prediction," Summer 2017.
- Vidhu Appalaraju, "Identity Threat Assessment and Prediction," Summer 2017.
- Robert Bolt, "Identity Threat Assessment and Prediction," Summer 2017.
- Sriram Chilukuri, "Identity Threat Assessment and Prediction," Summer 2017.
- Phuc Dang, "Identity Threat Assessment and Prediction," Summer 2017.
- Joon (Seungjun) Lee, "Identity Threat Assessment and Prediction," Summer 2017.
- Matthew Snyder (intern from Cornell), "Identity Threat Assessment and Prediction," Summer 2017.
- Haoran (Emma) Niu, "Identity Management Maturity and Measurement," Summer 2016, Fall 2016.
- Johnny Rojas, "Consumer Biometrics Applications and Trends," Summer 2016.
- Rohan Kondetimmanahalli, "Identity Threat Assessment and Prediction," Fall 2015.
- Nolan Cocoran, "Trust Valuations in Social Media," Summer 2015 present.
- Sirat al-Nahi, "Identity Threat Assessment and Prediction," Fall 2014, Spring 2015, Summer 2015, Fall 2015.
- Osvaldo Castellanos, "Identity Threat Assessment and Prediction," Fall 2014, Spring 2015, Summer 2015, Fall 2015.
- Ty Dameron, "Identity Threat Assessment and Prediction," Fall 2014, Spring 2015, Summer 2015, Fall 2015
- Bria H Moore, "Identity Threat Assessment and Prediction," Fall 2014, Spring 2015.
- Clarissa Rodriguez, "Identity Threat Assessment and Prediction," Fall 2014, Spring 2015.
- Megan Wenning, "Identity Threat Assessment and Prediction," Fall 2014, Spring 2015.
- Michael Walker, "Identity Threat Assessment and Prediction," Fall 2014.
- Garrick White, "Speech-driven Reporting," Spring 2013, Summer 2013, Fall 2013.
- Mengke Che, "Mobile Wallet: Value and Risks," Spring 2013, Fall 2013.
- Jacklyn Brenna, Multi-dimensional Identity, Fall 2012.
- Nik Lane, "Distributed Systems," Computer Engineering, Spring 2005.
- Allison Liu, "Trust, Deception and Fraud in Distributed Systems," Computer Engineering, Fall 2004.
- Elizabeth Van Ruitenbeek, "Software Engineering," Computer Engineering, Fall 2004.
- Daniel Faith, "System Maintenance," Computer Engineering, June 2000- 2003.
- Siddharth Jashnani, "System Maintenance and Web Interfaces," Computer Science, 2000.
- SeeNeng Foo, "Computer and Networking," Computer Engineering, Spring 1997 December 1999.
- Scott Bell, "User Interface Development for Software Engineering Tools," Computer Engineering, Summer 1997 January 2000.
- Jonathan DeWitt Wolfe, "Virtual Modeling and User Interface Design," Computer Engineering, Summer 1999.

- Jason Peavy, "System Maintenance and Evolution," Computer Science, Summer 1999.
- Patrick Neise, ""Distributed Systems and User Interface Design for Software Engineering Tools," Computer Engineering Area, Summer 1998 Summer 1999.
- Chance Richie, "Knowledge and Domain Modeling," Chemical Engineering, Summer 1998 Spring 2000.
- Sumeet Sharma, "System Engineering Tool Development and Integration," Computer Science, Fall 1998.
- Rebecca Robertson, "User Interface Development for Software Engineering Tools," Electrical and Computer Engineering Department, Computer Engineering Area, Summer 1997 Spring 1998.
- Nathan Moss, "User Interface Development for Software Engineering Tools," Electrical and Computer Engineering Department, Computer Engineering Area," Summer 1997 Spring 1998.
- Alan Nelson," Development and Maintenance of Project Web Sites," Electrical and Computer Engineering Department, Computer Engineering Area, Summer 1997 Summer 1998.
- Agustinus Darmawan, "User Interface Development for Software Engineering Tools," Electrical and Computer Engineering Department, Computer Engineering Area, Summer 1997.
- Alex Roesler, "Virtual Environment," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 1995 Spring 1997.
- Gabriel Brostow, "Modeling and Interactive Interfaces for Virtual Environments," Electrical and Computer Engineering Department, Computer Engineering Area, Spring 1994 Spring 1997.
- Jack Hernandez, "WWW Information Dissemination for Research and Teaching Activities," Electrical and Computer Engineering Department, Computer Engineering Area, Fall 1995 Spring 1997.
- Jason Mechler, "Graphical User Interface for Scheduling System Simulation," Electrical and Computer Engineering Department, Computer Engineering Area, Spring 1995.
- Joycelyn Ward, "Graphical User Interface Development for Robotic Assembly Planning," Electrical and Computer Engineering Department, Computer Engineering Area," Spring 1995.
- Idorenyin Udoh, "Exploration of Agent-based Systems Research," Visiting student from Louisiana State University and A&M College, Baton Rouge, LA, Summer 1995.

MEMBERSHIPS IN PROFESSIONAL AND HONORARY SOCIETIES:

- Institute of Electrical and Electronic Engineers, (Computer Society, Robotics & Automation Society, and Systems, Man, and Cybernetics Society), Senior member.
- IEEE Technical Council on Software Engineering (TCSE), member.
- IEEE Computer Society Golden Core, Senior member.
- American Association for Artificial Intelligence, member.
- Association for Computing Machinery (ACM), member.
- International Society of Applied Intelligence, member.
- American Society of Engineering Education, member.
- Foundation for Intelligent Physical Agents, member.
- Society of Computer Simulation, past member.
- Society of Women Engineers, member.
- Sigma Xi, member.
- Phi Kappa Phi, member.