Martin C. Carlisle

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Texas A&M University
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EDUCATION

Honors B.S. magna cum laude 1991, University of Delaware
Majors: Mathematics and Computer Science
Minor: Economics
Thesis: "On Local Register Allocation" (advisor: Errol Lloyd).

M.A. 1993, Princeton University
Ph.D. 1996, Princeton University
Thesis: "Olden: Parallelizing Programs with Dynamic Data Structures on Distributed Memory Machines" (advisor: Anne Rogers).

EXPERIENCE

Professor of Practice, Computer Science Department, Texas A&M University, August 2019-present
Director of Academic Affairs and Teaching Professor, Information Networking Institute, Carnegie Mellon University, August 2016-August 2019.

- Education director for picoCTF security competition, 2018. Oversaw team of 4 students developing learning objectives, problems and teaching materials. Over 27,000 participants with over 600 teachers.
- Technical lead for picoCTF security competition, 2017. Managed framework development and problem development. Over 18,000 participants.
- Oversee recruiting, admissions, advising, enrollment and student services

Professor, United States Air Force Academy, July 2006 – July 2016.

- Department Head, 2008-2009, 2014-2015. (Led department through two ABET visits)
- Coach, Cyber Competition Team, 2010-2016.

Director, Academy Center for Cyberspace Research, August 2012-June 2014, August 2015-July 2016.

- Managed 4 researchers and > $750k/year budget

Associate Professor, United States Air Force Academy, July 2001-June 2006.

- Lead developer RAPTOR, a flowchart simulator for introductory students (used in at least 189 schools in 30 countries)
- Developed A#, a port of Ada to the .NET platform.

Visiting Associate Professor, Auburn University, August 2005-May 2006.

- Integrated Ada into Visual Studio .NET.

Assistant Professor, United States Air Force Academy, July 1996-June 2001.

- Developed AdaGIDE, a compilation environment used by over 1,000 students per year at the Academy and distributed worldwide.
- Developed RAPID, a platform independent graphical user interface design tool.

Ph. D. candidate, Princeton University, 1991-1996.

- Implemented Olden, a compiler/runtime system for parallelization of C programs that use dynamic data structures.

COURSES TAUGHT

- Secure Coding
- Introduction to Information Security
- Software Reverse Engineering
- Secure Networks
- Introduction to Embedded Systems
- Languages and Machines
- Compiler Design and Analysis
- Operating Systems
- Computer Graphics
- Programming Languages
- Data Abstraction
- Algorithms and Data Structures
- Fundamental of Programming and Computer Science
- Introduction to Computer Systems
- Introduction to Computing
- Fundamentals of Computer Science
- Computer Science Foundations
- Java Programming
- Discrete Mathematics

HONORS

- Air Force Meritorious Civilian Service Award, 2016.
- National Academies of Sciences, Engineering, and Medicine Research Adviser, 2015
- SANS People Who Made a Difference in Security Award, 2014
- US Air Force Academy Heiser Award (selected by students as Outstanding Senior Science & Engineering Educator), 2012
- Air Force Exemplary Civilian Service Award, 2010.
- ACM Distinguished Educator, 2009.
- US Air Force Academy Outstanding Science & Engineering Educator, 2009.
- Colorado Professor of the Year (CASE/Carnegie Foundation for the Advancement of Teaching), 2008
- Arthur S. Flemming Award for Exceptional Federal Service, 2007.
- Senior Member, Association for Computing Machinery, 2007.
- USAFA UCI “Top Performer”, 2005.
- Distinguished Service Award, ACM SIGAda, 2004.
- Air Force Civilian Achievement Medal, 2003.

- Research Excellence Award, US Air Force Academy Department of Computer Science, 1998, 2003, 2010.
- Outstanding Ada Community Contributions, ACM SIGAda, 2002.
- Malham M. Wakin Character and Leadership Development Award, US Air Force Academy, 2002.
- Angel Award, Volunteer service to the Academy Mission, US Air Force Academy, 1999.
- Outstanding Academy Educator, US Air Force Academy Department of Computer Science, 1998.
- Outstanding Junior Faculty Member, US Air Force Academy Department of Computer Science, 1997.
- Air Force Communications and Information Professionalism Award, 1997.
- Hertz/Princeton Graduate Fellowship, 1991-96
- National Science Foundation Graduate Fellowship, 1991-93
- Excellence in Teaching Award, Princeton University Engineering Council, 1995
- Phi Beta Kappa, 1991
- Phi Kappa Phi, 1990
- Omicron Delta Epsilon (Economics), 1991
- Pi Mu Epsilon (Mathematics), 1991

PUBLICATIONS

Books

- *An Introduction to Languages and Machines*, McGraw Hill Primis, 2006.

Book Chapters

- "Supporting Dynamic Data Structures", with A. Rogers. In *Languages, Compilation Techniques and Run Time Systems for Scalable Parallel Systems: Recent Advances and Future Perspectives*, Springer-Verlag, 1997.

Journal Articles

- "The IRONSIDES Project: Final Report", with B. Fagin (2nd author). *Ada User Journal*, Vol 9, Number 3, September 2018, pp 197-202.
- "Security vs Performance in DNS Servers: A Case Study", with B. Fagin (2nd author). *International Journal of Emerging Technology and Advanced Engineering*, Vol 8, No. 7, July 2018.
- "RAPTOR: A Visual Programming Environment for Teaching Object-Oriented Programming." *Journal of Computing Sciences in Colleges*, Vol 24, No. 4, April 2009.
- "Ada 2005 on .NET and Mobile and Embedded Devices." *Crosstalk: the Journal of Defense Software Engineering*, August 2006.
- "The New Java Security Architecture", with I. Ruffin and J. Hamilton, Jr (3rd author). *Crosstalk: the Journal of Defense Software Engineering*, July 2006.
- "Automated Load Balancing of a Missile Defense Simulation using Domain Knowledge", with L. Merkle. *Journal of Defense Modeling and Simulation*, 1(1):59-68, January 2004.

- "RAPTOR: Introducing Programming to Non-Majors with Flowcharts", with T. Wilson, J. Humphries and S. Hadfield, *Journal of Computing Sciences in Colleges*, 19(4):52-60, April 2004.
- "Introduction to Cryptography", with J. Humphries (2nd author). *Journal of Educational Resources in Computing*, 2(3), September 2002.
- "ROBOT Simulator", with K. Shomper. *Journal of Educational Resources in Computing*, 2(2), June 2002.
- "Software Caching and Computation Migration in Olden", with A. Rogers. *Journal of Parallel and Distributed Computing*, 38(2):248-255, 1996.
- "Supporting Dynamic Data Structures on Distributed Memory Machines", with L. Hendren, J. Reppy, and A. Rogers (2nd author), *ACM Transactions on Programming Languages and Systems*, 17(2):233-263, 1995.
- "Determining uni-connectivity in directed graphs", with A. Buchsbaum (2nd author). *Information Processing Letters*, 48(1):9-12, 1993.
- "On the k-coloring of Intervals", with E. Lloyd. *Discrete Applied Mathematics* 59:225-235, 1995.

Refereed Conference Proceedings

- "Pico-Boo!: How to avoid scaring students away in a CTF competition, " with Kentrell Owens, Alexander Fulton, Luke Jones (4th author),. *Proceedings of the 23rd Colloquium for Information Systems Security Education*, Las Vegas, Nevada, June 2019 (Best Student Paper award).
- "ByteWise: A Case Study in Neural Network Obfuscation Identification," with Luke Jones, Sebastian Banescu, Delbert Christman (4th author), *Proceedings of IEEE CCWC 2018*, Las Vegas, Nevada, January 2018 (acceptance rate 34%).
- "Making DNS Servers Resistant to Cyber Attacks: An Empirical Study on Formal Methods and Performance," with Barry Fagin, Brad Klanderman (3rd author), *Proceedings of the 7th Annual IEEE COMPSAC Workshop on Network Technologies for Security, Administration and Protection (NETSAP 2017)*, Torino Italy, July 2017.
- "CARDINAL - Similarity Analysis to Defeat Malware Compiler Variations," with Luke T Jones, Andrew Sellers, *Proceedings of the 11th International Conference on Malicious and Unwanted Software (2016 MALCON)*, Fajardo Puerto Rico, October 2016. (acceptance rate 32%)
- "Using CTFs for an Undergraduate Cyber Education," with Michael Chiaramonte, David Caswell, *Proceedings of the 2015 USENIX Summit on Gaming, Games and Gamification in Security Education (3GSE '15)*, Washington DC, August 2015.
- "Heuristic Malware Detection via Basic Block Comparison," with Frank Adkins, Luke Jones, Jason Upchurch (supervised undergraduate student research), *Proceedings of the 8th International Conference on Malicious and Unwanted Software "The Americas" (Malware 2013 The Americas)*, Fajardo Puerto Rico, October 2013. (acceptance rate 31.5%)

- "Provably Secure DNS: A Case Study in Reliable Software," with Barry Fagin (2nd author), *Proceedings of Ada Europe 2013,* Berlin Germany, June 2013. (Best presentation award)
- "IRONSIDES: DNS With No Single-Packet Denial of Service or Remote Code Execution Vulnerabilities," with Barry Fagin, *Proceedings of IEEE GLOBECOM,* December 2012. (966 of 2560 submissions accepted, 38%)
- "The Glowworm Hash: Increased Speed and Security for BBC Unkeyed Jam Resistance," with Leemon Baird, William Bahn, and E. Smith (2nd author). *Proceedings of the 2012 IEEE Military Communications Conference*, October 2012.
- "Effectively Teaching Cyber Warfare to a Non-Technical Audience", with David Bibighaus, David Gibson, David Merritt, Jeff Boleng, James Maher (3rd author). *7th International Conference on Information Warfare and Security,* Seattle WA, March 2012.
- "Defining, Integrating, and Assessing a Purposeful Progression of Cross-Curricular Initiatives into a Computer Science Program", with Steve Hadfield, Dino Schweitzer, David Gibson, Barry Fagin, Jeff Boleng, Dave Bibighaus (5th author). *Frontiers in Education 2011,* Rapid City SD, October 2011.
- "Fast Hashes for Jam Resistant Communication", with L. Baird, W. Bahn (2nd author). *Proceedings of the 2010 IEEE Military Communications Conference*, San Jose CA, November 2010.
- "Promoting Skepticism in the Security Classroom", with D. Schweitzer. *Proceedings of the 14th Colloquium for Information Systems Security Education*, Baltimore MD, June 2010.
- "Using YouTube to Enhance Student Class Preparation in an Introductory Java Course." *Proceedings of the 41st SIGCSE Technical Symposium on Computer Science Education*, Milwaukee WI, March 2010. (103 of 303 submissions accepted, 34%)
- "Partitioned Neural Networks", with D. Sutton, T. Sarmiento, L. Baird (2nd author). *2009 International Joint Conference on Neural Networks,* June 2009, Atlanta, GA.
- "RAPTOR: A Visual Programming Environment for Teaching Object-Oriented Programming." *Proceedings of Consortium for Computing Sciences in Colleges Southwestern Regional Conference,* San Diego CA, April 2009.
- "Timing Neural Networks in C and Ada", with L. Baird. *Proceedings of SIGAda 2007*, Washington DC, November 2007.
- "Design and Use of a Secure Testing Environment on Untrusted Hardware", with L. Baird. *Proceedings of the 2007 IEEE SMC Information Assurance Workshop*, West Point NY, June 2007, pp. 349-354.
- "Keyless Jam Resistance", with L. Baird, W. Bahn, M. Collins and S. Butler (4th author). *Proceedings of the 2007 IEEE SMC Information Assurance Workshop,* West Point NY, June 2007, pp. 143-150.

- "A Global Look at Authentication", with S. Hamilton and J. Hamilton, Jr (2nd author). *Proceedings of the 2007 IEEE SMC Information Assurance Workshop*, West Point NY, June 2007, pp. 1-8.
- "A Performance Analysis of the SPRiNG Protocol Through Simulation", with K. P. Richardson and J. A. Hamilton, Jr (3rd author). *Proceedings of the 2007 SCS/ACM Simulation Software Security Symposium, Spring Simulation Multiconference*, Norfolk VA, March 2007 (Best Paper Award).
- "Automatic OO Parser Generation using Visitors for Ada 2005." *Proceedings of SIGAda 2006,* Albuquerque NM, November 2006 (68% acceptance rate).
- "Integrating Ada 2005 into Visual Studio 2005", with J. A. Hamilton, Jr. *Proceedings of SIGAda 2006,* Albuquerque NM, November 2006 (68% acceptance rate).
- "Toward a More Effective Visualization Tool to Teach Novice Programmers", with John Giordano (2nd author). *Proceedings of SIGITE 2006,* Minneapolis MN, October 2006.
- "Safely Redistributing Untrusted Code using .NET", with J. Humphries and J. Hamilton, Jr. *Proceedings of the 2006 IEEE SMC Information Assurance Workshop,* West Point NY, June 2006. (~50% acceptance rate based on 2005 data)
- "Tools for Teaching Introductory Programming: What works", with K. Powers, P. Gross, S. Cooper, M. McNally, K. Goldman, V. Proulx (panelist). *Proceedings of the 37th SIGCSE Technical Symposium on Computer Science Education,* Houston TX, March 2006. (14 of 26 submissions accepted, 54%)
- "Simulation Experimentation with Secure Overlay Services", with H. Fletcher, K. Richardson and J. Hamilton, Jr (3rd author). *SCS Summer Simulation Multiconference,* Philadelphia PA, July 2005. (~75% acceptance rate based on 2004 data)
- "Evaluating Secure Overlay Services through OPNET Simulation", with H. Fletcher, K. Richardson and J. Hamilton, Jr (3rd author). *SCS Spring Simulation Multiconference,* San Diego CA, April 2005.
- "RAPTOR: A Visual Programming Environment for Teaching Algorithmic Problem Solving", with T. Wilson, J. Humphries and S. Hadfield, *Proceedings of the 36th SIGCSE Technical Symposium on Computer Science Education,* Saint Louis MO, February 2005. (104 of 330 submissions accepted, 32%)
- "RAPTOR: Introducing Programming to Non-Majors with Flowcharts", with T. Wilson, J. Humphries and S. Hadfield, *Proceedings of the 10th Annual CCSC Central Plains Conference,* Warrensburg MO, April 2004.
- "Multilanguage Programming with Ada in the .Net Environment", with J. Humphries and T. Wilson (2nd author). *Proceedings of SIGAda '03,* San Diego CA, December 2003.

- "The Case for Ada at the USAF Academy", with R. Sward, B. Fagin and D. Gibson (2nd author). *Proceedings of SIGAda '03,* San Diego CA, December 2003.
- "Weaving Ada 95 into the .NET Environment", with R. Sward and J. Humphries. *Proceedings of SIGAda '02,* Houston TX, December 2002. Also appears in *Ada Letters,* 23(1):22-26, March 2003.
- "Reinforcing Dialog-Based Security," with S. Studer. *Proceedings of the 2001 IEEE SMC Information Assurance Workshop,* West Point NY, June 2001. (~50% acceptance rate based on 2005 data)
- "A Truly Implementation Independent GUI Design Tool." *Proceedings of SIGAda '99,* Redondo Beach CA, October 1999. Also appears in *Ada Letters*, 19(3): 47-52, September 1999.
- "RAPID: A Free, Portable GUI Design Tool," with Pat Maes. *Proceedings of SIGAda'98,* Washington DC, November 1998. Also appears in *Ada Letters,* 18(6):158-164, November 1998.
- "Graphics for Free." *Ada Software Engineering and Education Technologies Workshop,* Monterey CA, July 1998. Also appears in *Ada Letters*, 18(5):47-50, October 1998.
- "AdaGIDE: A Friendly Introductory Programming Environment for a Freshman Computer Science Course," with A.T. Chamillard. *Ada Software Engineering and Education Technologies Workshop,* Monmouth NJ, June 1997. Also appears in *Ada Letters*, 18(2):42-52, March 1998.
- "Multiple Inheritance in Ada 95", In "Early Projects Using Ada at the Air Force Academy," Samuel Grier. *Ada Software Engineering and Education Technologies Workshop,* Monmouth NJ, June 1997. Also appears in *Ada Letters*, 18(1):92-109, January 1998.
- "Software Caching and Computation Migration in Olden", with A. Rogers. *Fifth ACM SIGPLAN Symposium on Principles and Practice of Parallel Programming,* pp. 29-38, 1995. (22 of 118 submissions accepted, 19%).
- "Early Experiences with Olden", with L. Hendren, J. Reppy, and A. Rogers. *Proceedings of the 6th International Workshop on Languages and Compilers for Parallel Computing*, Lecture Notes in Computer Science 768, Springer Verlag, pp. 1-20, 1993. (Invited).
- "On the k-coloring of Intervals", with E. Lloyd. *Proceedings of the Third International Conference on Computing and Information* (ICCI), Lecture Notes in Computer Science 497, Springer Verlag, pp. 90-101, 1991. (71 of 166 submissions accepted, 43%).

Reviewed Articles

- "Roundtable on Security Issues in the Cloud-assisted Internet of Things," with S. U. Khan, R Sandhu, M. R. Hagerott, and W. Shi. *IEEE Cloud Computing,* March/April 2016.
- "How Ada 2005 impacts CS1/CS2." *Ada Letters*, 26(1), April 2006.
- "Teaching the Operational Air Force." *USAFA Educator,* 12(1), 8, Winter 2004.

- "An Automatic 'Visitor' Generator for Ada", with R. Sward. *Ada Letters*, 22(3), 42-47, September 2002.
- "A Brief Summary of 802.11 Security Issues for the US Air Force Academy", technical report, July 2002.
- "An Automatic Object-Oriented Parser Generator for Ada." *Ada Letters*, 20(2), 57-63, June 2000.
- "Graphics for Free." *SIGCSE Bulletin Inroads*, 31(2):65-68, June 1999.

Other Presentations

- "Using picoCTF to Teach Introductory Computer Security Concepts", workshop at 2019 Computer Science Teachers Association conference, Phoenix AZ, July 2019
- "picoCTF: Expanding the Cyber Talent Pipeline", keynote speech, Evanta Global Chief Information Security Officer Conference, August 2018, Hilton Head, SC.
- "Challenges and Opportunities in the Internet of Things", keynote speech, IEEE CCWC 2018, January 2018, Las Vegas, NV.
- "Training the Cyber Warrior: A Learner-Centric Model", invited panelist, I/ITSEC 2015, December 2015, Orlando, FL.
- "Why I Came Back to Ada", keynote speech, SIGAda 2011, November 2011, Denver, CO.
- "What Should a College Classroom Look Like in a Digital Age?", keynote speech, Western Canada Conference on Computing Education, May 2011, Prince George, BC, Canada.
- "Convolutional Neural Networks", Research Seminar, October 2006, Auburn University, Auburn, AL.
- "Safely Redistributing Untrusted Code Using .NET", Research Seminar, January 2006, Auburn University, Auburn, AL.
- "Compilers, Virtual Machines and the .NET Framework", ACM Invited Lecture, November 2004, Auburn University, Auburn, AL.
- "RAPTOR: A Visual Introduction to Programming for Non-Majors", SIGCSE 2004, March 2004, Norfolk, VA.
- "EA-Based Approach for Detecting Stealthy Attacks", IEEE SMC IA Workshop, June 2002, West Point, NY.
- "Confessions of an Academic Ada Zealot", Keynote Address, SIGAda 2001, October 2001, Minneapolis, MN.
- "Developing Ada 95 code with a Graphical User Interface (GUI) Builder", Tutorial, ASEET '99, July 1999, Colorado Springs, CO.
- "Developing Solutions in Windows 95/NT with Ada", invited panelist. Tri-Ada '97, November 1997, St. Louis, MO.
- "New Features of Ada 2005", Tutorial, SIGAda 2006, November 2006, Albuquerque, NM.
- "A#: Programming PDAs and .NET devices with Ada", Tutorial, SIGAda 2006, November 2006, Albuquerque, NM.
- "A#: Programming PDAs and .NET devices with Ada", Tutorial, SIGAda 2005, November 2005, Atlanta, GA.

- "A#: Programming PDAs and .NET devices with Ada", Tutorial, SIGAda 2004, November 2004, Atlanta, GA.
- "A#", Tutorial, SIGAda 2003, December 2003, San Diego, CA.

Original Software

- RAPTOR, with T. Wilson, J. Humphries. Graphical programming environment. Distributed worldwide.
- A#. Compiler. Distributed worldwide.
- AdaGOOP. Compiler generator. Distributed in US and Canada.
- Webpost. Web-based assignment submission system. Used at USAFA.
- Wireless installation tools. Used at USAFA.
- AdaGIDE, with A. Chamillard, D. Michel, G. deMontmollin, A. Hilscher. Programming environment. Distributed worldwide.
- RAPID, with W. Watkinson II. Graphical user interface design tool. Distributed worldwide.

GRANTS

- Co-PI,Cisco Foundation, education grant, picoCTF, $75k, 2019.
- Co-PI, US Air Force, equipment grant, Air Force Cyber Innovation Center laboratories, $1.8M, 2015.
- PI, DARPA, *Toward a Provably Secure DNS Server*, used to download classes and hire additional researcher, $180k, 2015.
- PI, Institute for Defense Analyses, travel grant, summer research project, $24k, 2015.
- Co-PI, NRO, equipment/travel grant, cyber defense lab, $100k, 2015.
- Independent Evaluator, NSF SFS 1303430 *Establishing the New Mexico Digital Forensics Academy*, $10k, 2014.
- PI, DARPA, *Cyber Cup*, $60k, 2014.
- PI, DARPA, *Toward a Provably Secure DNS Server*, used to download classes and hire additional researcher, $180k, 2014.
- PI, Institute for Defense Analyses, travel grant, summer research project, $22k, 2014.
- Co-PI, NRO, equipment/travel grant, cyber defense lab, $100k, 2014.
- PI, DARPA, *Cyber Cup*, $49k, 2013.
- Co-PI, NRO, equipment/travel grant, cyber defense lab, $100k, 2013.
- PI, DARPA, *Toward a Provably Secure DNS Server*, used to download classes and hire additional researcher, $150k, 2013.
- PI, DIAP, equipment grant, cyber defense lab, $250k, 2013.
- Co-PI, NRO, equipment/travel grant, cyber defense lab, $100k, 2012.
- PI, DARPA, *Toward a Provably Secure DNS Server*, used to download classes and hire additional researcher, $150k, 2012.
- PI, Institute for Defense Analyses, travel grant, summer research project, $21k, 2012.
- Co-PI, NRO, equipment/travel grant, cyber defense lab, $100k, 2012.
- PI, DARPA, *Toward a Provably Secure DNS Server*, used to download classes and hire additional researcher, $173k, 2011.

- Co-PI, NRO, equipment/travel grant, cyber defense lab, $100k, 2011.
- PI, USAF, equipment grant, cyber defense lab, $50k, 2011.
- Co-PI, NRO, equipment/travel grant, cyber defense lab, $100k, 2010.
- PI, USAF, equipment grant, cyber defense lab, $50k, 2010.
- PI, Institute for Defense Analyses, travel grant, summer research project, $13k, 2010.
- Co-PI, NRO, $50k, 2007. Used to fund collaborating researchers.
- Co-PI, NSA Information Assurance, equipment grant, $50k, 2007.
- Co-PI, NSA Information Assurance, equipment grant, $50k, 2006.
- Co-PI, NSF Cybertrust, 2006. Unfunded.
- PI, Institute for Defense Analyses, travel grant, summer research project, $10k, 2006.
- PI, Institute for Defense Analyses, travel grant, summer research project, $20k (faculty member + student), 2005.
- PI, Institute for Defense Analyses, travel grant, summer research project, $10k, 2004.
- PI, Missile Defense Agency, $150k, 2004. Used to fund collaborating researchers.
- Co-PI, NSA Information Assurance, equipment grant, $50k, 2003.
- Co-PI, NSA Information Assurance, equipment grant, $50k, 2002.
- Co-PI, NSA Information Assurance, equipment grant, $50k, 2001.

SERVICE

- Managing Editor, Military Cyber Affairs, Journal of the Military Cyber Professionals Association, 2015-2016.
- USAFA Core Curriculum (General Education) Review Committee, 2014-2016.
- DARPA BAA review panelist, 2013
- USAFA Faculty Forum Executive Board and Chair, Standing Committee on Curriculum Issues, 2013-2014.
- USAFA Faculty Promotion Committee, 2010-2015.
- DARPA BAA review panelist, 2011
- Reviewer for Transactions on Learning Technologies, 2011
- Reviewer for SIGCSE 2004, 2005, 2006, 2007, 2008,2009,2010,2011,2012,2013,2014,2015,2016
- Reviewer for Simulation: Transactions of the Society for Modeling and Simulation International 2008
- Reviewer for IEEE Journal of Educational Technology and Society 2008
- Reviewer for Journal of Defense Modeling and Simulation 2005
- Treasurer, ACM SIGAda, 2005-2009
- Managing Editor, ACM SIGAda Ada Letters, 2000-2005
- Program Committee, SIGAda 2002,2003,2004,2005,2006,2007,2008
- Program Committee, IEEE SMC IA Workshop 2002
- Conference Chair, ASEET ‘99

- PhD Thesis committee member: Kuhr, Mark and Sanders, Derek. Auburn University, 2009.
- PhD Thesis committee member: Yu, Xuan. Auburn University, 2006.
- PhD Thesis committee member: Johnson, Robert. *Tagged protected types: Inheritance and polymorphism extensions for synchronization and mutual exclusion in Ada*, Colorado Technical University, 2000.