Curriculum Vitae JAMES VALLINO SOFTWARE ENGINEERING B. Thomas Golisano College of Computing and Information Sciences

Contact Information

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Office location:	GOL 1559

Education

Ph.D. Computer Science, University of Rochester, Rochester, NY, May 1998 Dissertation – "Interactive Augmented Reality" Advisor – Chris Brown

MS Computer Science. University of Rochester, Rochester, NY, May 1995

MS Electrical and Computer Engineering, University of Wisconsin, Madison, WI, August 1976 Thesis – "SWITCH, a computer peripheral device which monitors 256 points" Advisor – James Skiles

BE Mechanical Engineering, Cooper Union, New York, NY, May 1975

Academic Employment

Rochester Institute of Technology, Rochester, NY

6/2016 – present. Professor, Software Engineering 7/2015 – 5/2016. Professor and Undergraduate Program Coordinator, Software

Engineering

7/2010 – 6/2015. Professor and Chair, Software Engineering

9/2008 – 6/2010. Professor, Software Engineering

9/2002 – 8/2008. Associate Professor, Software Engineering

9/2000 – 8/2002. Assistant Professor, Computer Science (50%) and Software Engineering (50%)

12/1997 – 8/2000. Assistant Professor, Computer Science

9/1994 to 12/1995. Teaching Assistant, University of Rochester, Rochester, NY, Computer Science

1/1985 to 12/1988, Adjunct Instructor, Brookdale Community College, Middletown, NJ, Computer Science

9/1975 to 5/1976 Teaching Assistant, University of Wisconsin, Madison, WI, Electrical and Computer Engineering

Non-Academic Employment

a. 3/2006 to 5/2006. Staff Engineer. CDS Real Time Embedded Software, Pratt & Whitney, East Hartford, CT

- Defined requirements and implemented first phase for a tool to assist with the specification and code generation for reporting telemetry data from P&W's F135 engine on the F-35 Joint Strike Fighter.
- Reviewed design approach for developing fault-tolerant engine controller software.
- Member of task force defining Preliminary System Safety Assessment and Failure Modes and Effects Analysis process steps.

12/2005 to 2/2006. Visiting Scientist. Software Engineering Laboratory, NASA Goddard Space Flight Center, Greenbelt, MD

- Reviewed the current state of SEL's Requirements to Design to Code methodology that generates designs and code from requirements scenarios. Formulated a mechanism by which safety property scenarios can be added to the methodology.
- Studied NASA's software systems safety procedures.

8/2005 to 11/2005. Staff Fellow. Office of Science and Engineering Laboratories, US Food and Drug Administration, Rockville, MD

- Investigated use of formal techniques for the design of medical devices. Provided guidance for using Eclipse as a platform for integrating formal method tools.
- Studied medical device regulations and reviewed software aspects of device pre-market applications.

6/1998 to 8/1998. Summer Intern. Xerox Corporation, Webster, NY

• Designed and implemented an augmented reality document viewer.

1/1986 to 8/1993. Research Scientist. Siemens Corporate Research, Inc., Princeton, NJ

- Completed feasibility study for Siemens Medical Systems (SMS) on options for development of a low cost teleradiology system.
- Implemented a prototype video rate image processing system using a Datacube MV20. This system removed the effects of collimating the x-ray beam on a medical angiography system.
- Assisted Siemens Energy & Automation (SE&A) in development of product and marketing strategy for incorporating networked communications into current and future product lines. Developed prototype of networked communications on SE&A products using a sub-set of the PROFIBUS field bus standard.

4/1984 to 1/1986. Project Engineer. AVL, Inc., Tinton Falls, NJ

- Software engineer on design team for bit-slice graphics engine. Contributed to design of the hardware architecture and microcode format.
- Project manager for the initial release of the AVL Starburst Computer Graphics System. Coordinated activities of nine software engineers in three project groups. Interacted with Product Planning and QA to determine product descriptions and gain final acceptance.

11/1977 to 4/1984. Member of Technical Staff. AT&T Information Systems/Bell Laboratories, Holmdel, NJ

• Lead software engineer for the AT&T Personal Computer Terminal 510. Responsible for firmware architecture, terminal feature definition, assignment of coding and developing sections of the final assembly code.

- Designed and microcoded a bit slice processor to execute two dimensional graphics compression algorithms.
- Specified and supervised FCC Part 64J and Part 15 Compliance testing on AT&T Dimension System 75 & 85 business terminals and peripherals.

9/1976 to 10/1977. Assistant Engineer. Ebasco Services Inc., New York, NY

• Designed and specified instrumentation and control systems for Arizona Public Service Cholla Units 2, 3 and 4. Responsible for integrating the plant computer with all subsystems in the power plant. Designed and performed several functional tests on analog control systems, control boards, and digital computer systems.

Teaching

Curricular Development

- a. Ongoing. Complete redesign of SWEN-261 Introduction to Software Engineering.
- *b.* Ongoing. SWEN-262 Engineering of Software Subsystems. Adding more coverage of basic object-oriented design, new design project.
- c. 2013. SWEN-561/562 Senior Project I/II. Semester conversion.
- *d.* 2010-2013. Coordinated the SE department's semester conversion efforts. Responsible for conversion of SWEN-262 Engineering of Software Subsystems, SWEN-561/562 Senior Project I/II, SWEN-564 Modeling of Real-Time and Embedded Systems.
- *e.* 2010. SWEN-101 SE Freshman Seminar. Worked with other seminar instructors to reformat seminar course to explore different aspects of software engineering rather than have the course concentrate on one larger project.
- *f.* 2003-2006. SWEN-563 Real-Time and Embedded Systems; SWEN-564 Modeling of Real-Time Systems; SWEN-565 Performance Engineering of Real-Time and Embedded Systems. Creation of cluster of three courses concentrating on different aspects of writing software for real-time and embedded systems.
- *g.* 2002. Complete redesign of SWEN-262 Engineering of Software Subsystems to follow a problem-based learning pedagogy.
- *h.* 1998-1999. Worked on committee that did a complete redesign of first-year CS sequence to move to Java as the language, and introduce new concepts such as event-driven programming, networking, and concurrency.

Ph.D. Dissertation

- a. Committee Member
 - i. Current. Mesh, E. (Software Engineering). Development of a Software Process Maturity Model for Scientific Research Projects. RIT.
 - ii. 2015. Mao, H. (Computing). Integrated Cardiac Electromechanics: Modeling and Personalization. External Chair. RIT.
 - 2004. Venkataraman, S. (Imaging Science). Investigation of Pulse Compression Technique and Time-frequency Analysis in Medical Ultrasound Imaging. External Chair. RIT.

M.S. Capstones/Theses

a. Advisor

- i. 2015. Lange, J. Capstone (Software Engineering): Requirements Traceability in Model-Driven-Development of Safety-Critical Embedded Systems. RIT.
- ii. 2014. Hammack, S. Project (Computer Science): Developing Multidisciplinary Laboratories with the Cypress PSoC. RIT.
- iii. 2012. DeFrancis, M. Thesis (Computer Engineering): Schedulability-Driven Dynamic Allocation of Scratchpad Memory for Real-Time Systems. RIT.
- iv. 2007. Chandler, D. Thesis (Computer Engineering): A Framework for Real-Time System Simulations in a Windows Environment. RIT.
- v. 2005. Thakkar, N. Thesis (Computer Science): General-Purpose Embedded Plant Simulator. RIT.
- vi. 2003. Finn, R. Project (Computer Science): A Web-enabled Thermostat. RIT.
- vii. 2003. Qin, Z. Project (Computer Science): A Web-Distributed Application: Playing Card Games. RIT.
- viii. 2002. Ruffino, C. Project (Computer Science): Graphical Editor for VHDL Development. RIT.
 - ix. 2002. Elner, Y. Project (Computer Science): Ethernet Portable Device. RIT.
 - x. 2000. Loudermilk, D. Project (Computer Science): Exposing Unit Project. RIT.
- xi. 2000. Ioselzon, Y. Project (Computer Science): Jemread Utility Meter Reading Program. RIT.
- xii. 2000. Croft, J. Project (Computer Science): JINI Enabled Theater System. RIT.
- b. Committee Member
 - i. 2004. Phillips, J. Project (Computer Science): Home Accounting System. Reader. RIT.
 - ii. 2001. Freyda, C. Project (Computer Science): Extensible Testing Framework for JRMS. Reader. RIT.
 - iii. 2001. O'Loughlin, D. Project (Computer Science): Face Recognition using Eigenfaces and Fisherfaces. Reader. RIT.
 - iv. 2000. Bessette, D. Project (Computer Science): An Exploration of Distributed Computing using JiniTM: User Location Service. Reader. RIT.
 - v. 2000. Pender, T. Project (Computer Science): Multi-drop JTAG Architecture. Reader. RIT.

Other Fractional Course Activity

- a. Independent Study Projects
 - i. Sean Janis, Independent Study (Computer Science), Examining Augmented Reality from a High Level, Advisor.
 - ii. Andy Gianfagna, Honors Independent Study (Software Engineering), Program Static Analysis and the MISRA C guidelines, Advisor.
 - iii. Jeff Robble, Honors Independent Study (Software Engineering), FSP Autocoding, Advisor.
 - iv. Devin Lane, Honors Independent Study (Software Engineering), Server Virtualization, Advisor.
 - v. Nathan Mesh, Independent Study (Software Engineering), Reverse Engineering of the Moab Execution Environment, Advisor.

- vi. Erik Czernikowski, Independent Study (Computer Science), Exploration of Real-time Linux Operating Systems, Advisor.
- vii. John Billings, Independent Study (Computer Science), Tini Board Exploration, Advisor.
- viii. Bill DeBacco, Independent Study (Computer Science), Cache Coherency, Advisor.
- ix. Aaron Leiby, Independent Study (Computer Science), Radiosity, Advisor.
- b. Other Student Mentoring
 - i. Research Assistant (Employed)
 - 1) Devin Lane, Honors Research Assistant, Hardware/software Co-Design, Advisor.
 - 2) Nick Shaw, Research Assistant (Co-op), Real-Time and Embedded Systems experiments, Supervisor.
 - 3) Greg Giacovelli, Research Assistant, Real-Time and Embedded Systems Lab setup, Supervisor.
 - 4) Zakir Mahomedy, Research Assistant (Co-op), KVM Debugger, Supervisor.
 - 5) John Mikucki, Research Assistant (Co-op), Sun Driveway Signage, Supervisor.

Scholarship

Publications - Peer Reviewed (subsections are recommended for journal articles, conference papers, books, and other publications as appropriate)

- a. Journal Articles
 - 1) M.Lukowiak, etal, "Cybersecurity Education: Bridging the Gap Between Hardware and Software Domains," *ACM Transactions on Computing Education*, v14n1, March 2014.
 - 2) K. N. Kutulakos and J. Vallino, "Calibration-Free Augmented Reality," *IEEE Transactions on Visualization and Computer Graphics*, v4 n1, pp 1-20, 1998.
 - J. R. Vallino and J. J. Skiles, "SWITCH An Intelligent 256-Point Contact and Voltage Monitor for Computer Use," *IEEE Transactions on Industrial Electronics and Control Instrumentation*, vol. IECI-25, no. 2, pp. 141-145, May 1978.
 - J. L. Stephenson, et. al., "Video Detection and Tracking of Tracer Particles in a Model Packed-Bed Reactor," *IEEE Transactions on Instrumentation and Measurement*, vol. IM-26, no. 2, pp. 88-91, June 1977.
- b. Conference Papers
 - 1) J. Vallino, "Ownership of Artifacts and Intellectual Property for Software-Intensive Capstone Design Projects," *2014 Capstone Design Conference*, Columbus, OH. June 2014. http://www.capstoneconf.org/resources/2014%20Proceedings/Papers/index.html
 - D. Krutz and J. Vallino, "Experiencing Disruptive Behavior in a Team Using 'Moles'," *Proceedings of 2013 Frontiers in Education Conference*, Oklahoma City, OK. October 2013.
 - 3) J. Vallino, "What Should Students Learn in Their First (and Often Only) Software Engineering Course?," *Proceedings of 2013 Conference on Software Engineering Education and Training*, San Francisco, CA. May 2013.
 - 4) L. Werner, etal, "Software Engineering Education via the use of Corporate-Sponsored Projects: A Panel Discussion of the Approaches, Benefits, and Challenges for Industry-Academic Collaboration," *Proceedings of 2013 Conference on Software Engineering Education and Training*, San Francisco, CA. May 2013.

- 5) M. Lukowiak, etal, "Developing an Applied, Security-Oriented Computing Curriculum," *Proceedings of 2012 ASEE Annual Conference,* San Antonio, TX. June 2012.
- M. Lutz, etal, "Instilling a Software Engineering Mindset through Freshman Seminar," *Proceedings of the 2012 Frontiers in Education Conference*, Seattle, WA. October 2012.
- F. Naveda, etal., "The Road We've Traveled: 12 Years of Undergraduate Software Engineering at the Rochester Institute of Technology," *Proceeding of Information Technology – Next Generations 2009*, Las Vegas, NV. April 2009.
- 8) J.Vallino and R. Czerniskowski, "Interdisciplinary Teaming as an Effective Method to Teach Real-Time and Embedded Systems Courses," *Proceedings of 2008 Workshop on Embedded Systems Education*, Atlanta, GA. October 2008.
- 9) D. Chandler and J. Vallino, "Control System Plant Simulator: A Framework for Hardware-In-The-Loop Simulation," *Proceedings of 2008 ASEE Annual Conference*, Pittsburgh, PA., June 2008.
- J.Vallino, "If You're Not Modeling, You're Just Programming: Modeling throughout an Undergraduate Software Engineering Curriculum," T. Kühne, Ed.: *Modeling in Software Engineering: Workshops and Symposia at MoDELS 2006*, Lecture Notes in Computer Science v4364, Springer, pp. 291 – 300.
- 11) J. Vallino, "If You're Not Modeling, You're Just Programming: Modeling throughout an Undergraduate Software Engineering Curriculum," *Model-Driven Engineering Language and Systems 2006 Educators Symposium*. Genova, Italy. October 2006.
- 12) J. Vallino and R. Czernikowski, "Thinking *Inside* the Box: A Multi-Disciplinary Real-Time and Embedded Systems Course Sequence," *Proceedings of Frontiers in Education Conference*. Indianapolis, IN. October 2005.
- 13) M. Lutz and J. Vallino, "Concurrent System Design: Applied Mathematics & Modeling in Software Engineering Education," *Proceedings of 2005 American Society of Engineering Education Conference*. Portland, OR. June 2005
- 14) R. Czernikowski and J. Vallino, "Embedded Systems Courses at RIT," Proceedings of Workshop on Computer Architecture Education, Special Session on Embedded Systems. Madison, WI. June 2005.
- 15) J. Vallino and R. Czernikowski, "Work In Progress Multi-disciplinary Real-Time and Embedded Systems Laboratory and Course Sequence," *Proceedings of the Frontiers in Education Conference*. Savanah, GA. October 2004.
- 16) M. Sebern, et. al., "Initial Experiences in ABET Accreditation of Software Engineering Programs," *Proceedings of the Frontiers in Education Conference*. Boulder, CO. November 2003.
- 17) J. Vallino, "Design Patterns: Evolving from Passive to Active Learning," *Proceedings of the Frontiers in Education Conference*. Boulder, CO. November 2003.
- 18) J. Vallino and C. M. Brown, "Haptics in Augmented Reality," *Proceedings of the IEEE International Conference on Multimedia Computing and Systems*, Florence, Italy, June 1999.
- 19) K. N. Kutulakos and J. Vallino, "Non-Euclidean Object Representations for Calibration-Free Video Overlay," *Proc. International Workshop on Object Representation for Computer Vision*, April 1996.

- K. N. Kutulakos and J. Vallino, "Affine Object Representations for Calibration-Free Augmented Reality," *Proc. IEEE Virtual Reality Annual Symposium*, April 1996, pp. 25-36.
- 21) K. N. Kutulakos and J. Vallino, "Affine Object Representations for Calibration-Free Augmented Reality," *Proc. ARPA Image Understanding Workshop*, February 1996.
- c. Book Chapters
 - J. McDonald, M. Sebern and J. Vallino, "Software Engineering Program Accreditation in the United States." In *Software Engineering: Effective Teaching and Learning Approaches and Practices*, H. Ellis, S. Demurjian and J. F. Naveda, (eds.), Information Science Reference, 2008.
 - J. Vallino and K. N. Kutulakos, "Augmenting Reality Using Affine Object Representations." In *Fundamentals of Wearable Computers and Augmented Reality*, W. Barfield and T. Caudell, (eds.), Lawrence Erlbaum Associates, Mahwah, NJ, 2001.
 - J. Vallino, "Augmenting Reality Without Camera or Scene Calibration" in Augmented Reality: Placing Artificial Objects in Real Scenes, Reinhold Behringer, Gudrun Klinker, David W. Mizell, (eds.), A. K. Peters, Ltd., Natick, MA, 1999.
 - R. Chou, P. Liu, J. Vallino and M-Y Chiu, "Behavior-based learning to control IR oven heating: preliminary investigations." In *Machine learning: from theory to applications*. *Cooperative research at Siemens and MIT*, S. J. Hanson, W. Remmele and R. L. Rivest, (eds.) Berlin: Springer-Verlag, 1993, pp. 229-40.

Publications - Partially Reviewed

- a. Other Publications
 - 1) Michael J. Lutz, J. Fernando Naveda, and James R. Vallino. 2014. Undergraduate software engineering. Commun. ACM 57, 8 (August 2014), 52-58. DOI=10.1145/2632361 http://doi.acm.org.ezproxy.rit.edu/10.1145/2632361
 - 2) Michael J. Lutz, J. Fernando Naveda, and James R. Vallino. 2014. Undergraduate Software Engineering: Addressing the Needs of Professional Software Development. *Queue* 12, 6, pages 30 (June 2014), 10 pages. DOI=10.1145/2636163.2653382 http://doi.acm.org.ezproxy.rit.edu/10.1145/2636163.2653382
 - 3) J. Vallino, "Cutting Across the Disciplines," *Computer*, vol. 43, no. 4, pp. 87-89, Apr. 2010.

Publications - Not Peer Reviewed

- a. Trade Articles
 - 1) J. Vallino, "Product Watch PVCS 2.0," *PC Tech Journal*, vol. 6, no. 10, pp. 131-132, October 1988.
 - J. Vallino, "Product Watch MKS RCS 4.2c," *PC Tech Journal*, vol. 6, no. 10, pp. 132-136, October 1988.
 - 3) J. Vallino, "Product Watch Seidl Version Manager 2.0, TLIB 4.02," *PC Tech Journal*, vol. 6, no. 3, pp. 141-146, March 1988.
 - 4) J. Vallino, "Tracking Code Modules," *PC Tech Journal*, vol. 4, no. 9, pp. 50-70, September 1987.
 - 5) J. Vallino, "Tech Notebook 76 Environment Variables," *PC Tech Journal*, vol. 5, no. 5, pg. 51, May 1987.

- 6) J. Vallino, "Tech Notebook 69 Environment Expansion," *PC Tech Journal*, vol. 4, no. 11, pg. 49, November 1986.
- b. Book Chapters
 - 1) J. Vallino and T. Farlow, "Version Control Systems," in Accessing C Tips from the Experts, Strawberry Software, Inc., Ed. New York, Van Nostrand Reinhold, 1989.
- c. Reports
 - J. R. Vallino, "Datacube MV200 and ImageFlow User's Guide," CS-TR 590 and NRL 95.3 National Resource Lab. for the Study of Brain and Behavior, Department of Computer Science, University of Rochester, June 1995.
 - "E13-90 Standard for SEMI Equipment Communications Standard Message Service (SMS) Application Notes," in 1990 SEMI Standards, vol 2., Equipment Automation. Semiconductor Equipment and Materials Institute, 1990.
 - J. M. Baratz, et. al., "Letter to the Editor: Comment on 'A Prototype SECS Message Service for Communication in the Semiconductor Manufacturing Environment'," *IEEE Transaction on Semiconductor Manufacturing*, vol. 2, no. 4, pg 178, November 1989.

Grants

- a. 3/1/2009-3/1/2012. Co-PI, NSF CCLI Grant: Multi-Disciplinary Applied Cryptography (\$149,598).
- b. 7/1/2003-6/30/2007. PI, NSF CCLI Grant: Multi-Disciplinary Real-Time and Embedded Systems Lab (\$199,758).

Other

- a. Patent
 - 1) 18 June 2002. US 6,408,257 Augmented-reality display method and system.

b. Workshops

- 1) "Rubrics Start to Finish," FIE 2008 Workshop, October 2008, Saratoga Springs, NY.
- 2) "Rubrics Start to Finish," SIGCSE 2008 Workshop, March 2008, Portland, OR.
- 3) "Rubrics: Start to Finish", RIT Faculty Institute on Teaching and Learning, May 2007.

c. Presentations

- 1) "Software Engineering and Other Careers in IT," Churchville-Chili Senior High School Career Day, February 2013.
- 2) "What is a Career in Software Engineering?," Fairport High School Engineering Career Night, November 2009.
- "Software Curricula vs. the Needs of a Regulated Industry," Staff Presentation, OSEL Division of Electrical and Software Engineering, US Food and Drug Administration, November 2005.
- 4) "Real-Time Java," Staff College Colloquium, Office of Science and Engineering Laboratories, US Food and Drug Administration, October 2005.
- 5) "EMACS an extensible editor," RIT CS Languages for Lunch Colloquium Series, April 2005

- 6) "Teaching Multi-Disciplinary Inside the Box Thinking," First Annual Conference on Computing and Information Sciences, Rochester Institute of Technology, January 2005.
- 7) "Design Patterns: Evolving from Passive to Active Learning," Rochester Institute of Technology, Department of Software Engineering Colloquium, October 2003.
- 8) "Collaborative Learning in GCCIS: The Good, the Bad and the Ugly," Rochester Institute of Technology, Faculty Institute on Teaching and Learning, May 2003.
- "There's Something to It...Reflections from the XP Universe Conference," Rochester Institute of Technology, Department of Computer Science, Colloquium Series, 25 October 2001.
- 10) "Real-time Java," SUNY Geneseo, Department of Computer Science, Seminar Series, 8 March 2001.
- 11) "Real-time Java," Rochester Java User's Group, 18 January 2001.
- 12) "University Research Threads," Kodak Engineering Conference, 28 September 2000.
- 13) "Real-time Java," Kodak Engineering Conference, 28 September 2000.
- 14) "Object-Oriented Programming," Rochester Institute of Technology College and Careers Day, 5 August 2000.
- 15) "Real-time Java," ACM Rochester Section Monthly Meeting, 13 June 2000.
- 16) "Real-time Java," Rochester Institute of Technology, Department of Computer Science, Colloquium Series, 11 May 2000.
- 17) "Augmented Reality Document Viewer," Rochester Institute of Technology, Department of Computer Science, Colloquium Series, 4 April 2000.
- 18) "Object-Oriented Programming," Rochester Institute of Technology College and Careers Day, August 1999.
- 19) "Haptics in Augmented Reallity," IEEE International Conference on Multimedia Computing and Systems, June 1999.
- "Interactive Augmented Reality," RIT Center for Imaging Science Colloquium Series, 9 December 1998.
- 21) "We Don't Need No Stinkin' Calibration," First IEEE International Workshop on Augmented Reality, November 1998.
- 22) "Haptics in Augmented Reality," IEEE Western New York Image Processing Workshop, 18 September 1998.
- 23) "Interactive Augmented Reality," SUNY Geneseo, Department of Computer Science, Seminar Series, 17 September 1998.
- 24) "Interactive Augmented Reality," ACM Rochester Section Monthly Meeting, 21 May 1998.
- 25) "Interactive Augmented Reality," Rochester Institute of Technology, Department of Computer Science, Colloquium Series, 13 April 1998.
- 26) "Interactive Augmented Reality Using Uncalibrated Cameras," IEEE Western New York Image Processing Workshop, 19 September 1997.
- 27) "Augmenting Reality with Minimal Calibration," SUNY Geneseo, Department of Computer Science, Seminar Series, 15 April 1996.
- d. Panels
 - 1) Intellectual Property. *2014 Capstone Design Conference*, Columbus, OH. June 2014. Invited participant.

Service (years shown are academic year in which service was done) *RIT Service*

- 1) 2015–present, 2006–2010 (Chair). SE Undergraduate Curriculum Committee.
- 2) 2012-present. Member, Student IT Office (SITO) Advisory Board.
- 3) 2012–present. Member, RIT Innovation Council.
- 4) 2003–present. Coordinator, Software Engineering Senior Projects.
- 5) 2003–present. College-level speaker, GCCIS Recruiting Open House.
- 6) 1999–present. Member, KGCOE ABET Accreditation Committee.
- 7) 2015–2016, 1999–2010. Coordinator, SE Department ABET Accreditation.
- 8) 2015. Co-Chair, GCCIS Dean Search Committee.
- 9) 2015. Participant, ITS Clipboard Survey focus group.
- 10) 2014. SE department representative, GCCIS Tenure/Mid-Tenure Committee
- 11) 2014. SE department representative, GCCIS Lecturer Promotion Committee
- 12) 2013–2014. Academic Senate appointee, Eisenhart Award Committee.
- 13) 2013–2014. Member, KGCOE Engineering Week Event Committee.
- 14) 2014. Member, GCCIS Outstanding Scholar Committee.
- 15) 2014. Chair, GCCIS Strategic Plan Faculty Success Subcommittee.
- 16) 2014. Member, Center for Multidisciplinary Studies Applied Arts and Sciences special program review framing group, interviewed by review team.
- 17) 2014. Member, RIT Task Force on Faculty Search and Selection Process Focus Group.
- 18) 2014. Member, RIT Focus group on increased DFW rates under semesters.
- 19) 2014. Reviewer, RIT (Patent) Technical Review Panel.
- 20) 2013. Member, GCCIS Women in Computing Director Search Committee.
- 21) 2011–2013. Member, GCCIS Calendar Conversion College Communications Committee
- 22) 2012. Chair, CS Chair Search Committee.
- 23) 2012. Member, CS Lecturer Search Administrative Oversight Committee.
- 24) 2012. Reviewer, Security department faculty applications: primary and secondary.
- 25) 2012. Reviewer, Information Sciences and Technologies chair applications.
- 26) 2012. Member, GCCIS Unified Exploration Program Committee.
- 27) 2012. Member, GCCIS Promotion Committee.
- 28) 2011–2012. GeneSIS Change Agent.
- 29) 2012. Originator, Student-based Software Services organization exploration group.
- 30) 2012. Provost appointee, RIT Institute Eisenhart Award Committee.
- 31) 2012. Member, IT Infrastructure Productivity Committee.
- 32) 1999–2010. Coordinator, SE Department ABET Accreditation.
- 33) 2006–2010. Chair, SE Curriculum Committee.
- 34) 2002–2010. SE department representative, GCCIS Assessment Committee.
- 35) 2010. Member, RIT Semester Conversion Co-op and Study Abroad Committee.
- 36) 2010. Member, RIT Semester Conversion January Mini-term Committee.
- 37) 2010. Chair (request from Provost), RIT Cross-Disciplinary Education Implementation Task Force.
- 38) 2003, 2004, 2007, 2008, 2009. SE Hiring Committee.
- 39) 2006 (Chair), 2008, 2009. SE Associate Professor Promotion Committee.
- 40) 2002–2004, 2006–2009. SE department advocate, GCCIS Honors Committee.
- 41) 2004, 2006 (Chair), 2007–2009. GCCIS Tenure Committee.
- 42) 2003, 2004, 2006–2007. Chair, SE Facilities Committee.

- 43) 2007. Member, RIT Creatvity and Invention Working Group.
- 44) 2001–2004. Chair, GCCIS FEAD Committee.
- 45) 2004. Member, GCCIS Mid-Tenure Committee.
- 46) 2004. Member, RIT On-Line Learning Courseware Review Committee.
- 47) 2003. Member, RIT First-Year Experience Review Panel.
- 48) 2003. Member, Learning Communities Advisory Board.
- 49) 2000–2001. Member. CS Hardware Sequence Committee.
- 50) 1998–2001. Member, CS Introductory Sequence Committee.
- 51) 2001. SE department representative, GCCIS Governance Committee.
- 52) 2001. SE department representative, GCCIS Mid-Tenure Committee.
- 53) 2001. Member, GCCIS Laboratory for Applied Computing Direction Group.
- 54) 2000. CAST representative. RIT Eisenhart Award Committee.
- 55) 1999. Member, CS Accreditation Committee.
- 56) 1999. SE program representative, KGCOE Computer Engineering Department Head Search Committee.
- 57) 1998. Member, CS Operating Systems Concentration Committee.

Professional Service

- a. Professional Group Activities
 - 1) 2015–2016. Past-chair, ASEE Software Engineering Constituent Committee
- b. Conference Program Activities
 - 1) 2015. CMT Wrangler, 2016 Capstone Design Conference
 - 2) 2013–2014. Chair, ASEE Software Engineering Constituent Committee
 - 3) 2012-2013, 2008. Program Chair, ASEE Annual Conference, Software Engineering Constituent Committee
 - 4) 2008 IEEE Workshop on Virtual Environments and Web Applications for e-Learning, Program Committee
- c. Organizing Committees
 - 1) 2008 Teaching Communication Skills in the Software Engineering Curriculum: A Forum for Professionals and Educators, Steering Committee
- d. Conference and Journal Reviewing
 - 1) 2006-2016. ASEE Annual Conference
 - *2)* 2016. International Journal on Engineering Education Special Issue for 2016 Capstone Design Conference. Guest Editor.
 - 3) 2013-2015, 2008. SIGCSE Annual Conference
 - 4) 2012-2015, 2010, 2008, 2006, 2005. Frontiers in Education Conference
 - 5) 2015, 2013. Capstone Design Conference
 - 6) 2013-2015. IEEE Transactions on Education
 - 7) 2013-2014. ASEE Computers in Education
 - 8) 2014. ACM Transactions on Computing Education
 - 9) 2014. ACM Transactions on Embedded Computing Systems
 - 10) 2014. IET Software
 - 11) 2013. IEEE Transactions on Software Engineering
 - 12) 2010. Elsevier Computers and Graphics (1)
 - 13) 2009. EURASIP Journal on Image and Video Processing (1)

- 14) 2008. Reviewed grant proposals for two programs run by the Singapore Government.
- 15) 2007. IEEE Spectrum
- 16) 2007. Software Engineering: Effecting Teaching and Learning Approaches and Practices. Chapter reviews.
- 17) 2007. International Journal on Engineering Education Trends in Software Engineering Education
- 18) 2006. IEEE Software
- 19) 2003, 2001. First round evaluator for IEEE Computer Society International Design Competition.
- 20) 2006 (4), 2002 (10). IEEE Computer Society International Design Competition
- 21) 2002. SIGGRAPH Conference. Review course proposals (3)
- 22) 2002. IEEE Transactions on System, Man, and Cybernetics Part B (1)
- 23) 2002. Journal of Systems and Simulation (1)
- 24) 2001. Reviewed chapters from book for Addison Wesley Longman.
- 25) 2001. SIGGRAPH Conference. (2)
- 26) 2001, 2000. Reviewed Java texts for Prentice-Hall (2)
- 27) 2001, 2000, 1999. IEEE Transactions on Visualization and Computer Graphics (4)
- 28) 2001. International Symposium on Augmented Reality (1)
- 29) 1998. IEEE Conference on Robotics and Automation (1)
- e. A list of professional service activities (external to RIT). Include for each item the type of service (chair, member, alternate, other) and activity. Begin each entry with the year(s) the service was done.
 - 1) 2004, 2002. NSF CCLI-EMD review panel

Certifications and Registrations

a. 1975. Engineer-in-Training Certificate.

Current Professional Memberships

- a. IEEE, Senior Member.
- b. IEEE Computer Society.

Honors and Awards

- a. 2010. RIT Eisenhart Award for Outstanding Teaching.
- b. 1976. University of Wisconsin Excellence in Teaching Award.

Professional Development

- a. 2013. RIT Workshop Early Intervention Program
- b. 2011. RIT Managers Workshops: Employment Law Overview; Harassment and Discrimination Training; Handling Employee Relations Issues; Performance Appraisal Process; Faculty Search and Selection Process Overview;
- c. 2010. ACE Department Chair Workshop.