

Susan K. Donohue, Ph.D.  
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### *Education*

May 2006                      Doctor of Philosophy (Systems Engineering)  
University of Virginia, Charlottesville, Virginia  
Dissertation Title        “Good Enough” to Release: A Probabilistic Assessment Method for  
Computer-Based Systems  
honors:                      Omega Rho

May 2000                      Master of Engineering (Systems Engineering)  
University of Virginia, Charlottesville, Virginia  
honors:                      Omega Rho

December 1992                Post-baccalaureate Certificate (Statistics)  
Virginia Commonwealth University, Richmond, Virginia

August 1980                   Bachelor of Arts, magna cum laude (Political Science)  
Marquette University, Milwaukee, Wisconsin  
honors:                      Phi Beta Kappa, Alpha Sigma Nu, Pi Gamma Mu, and Pi  
Sigma Alpha

### *Academic Employment*

August 2009 –                Assistant Professor  
Present                        Department of Technological Studies  
School of Engineering  
The College of New Jersey

Duties:                        Instruct/facilitate courses as assigned by the chair; advise  
undergraduate and graduate students; serve on department,  
school, and college committees as appointed by the chair  
and/or dean; serve in administrative positions as assigned  
by the chair; and perform other institutional and community  
outreach and service.

Courses:                       ETE 261, Multimedia Design; ETE 271, Structures and  
Mechanics; TED 480, Content and Methods in  
Technology/Pre-Engineering Education; TED 481, Seminar  
in Technology/Pre-Engineering Education; TCED 592,

Inclusive Methods in Technology Education; TCED 690, Advanced Curriculum in Design and Engineering; and TST 161, Creative Design.

June 2008 –  
June 2009

EEES PEER (Engineering Equity Extension Service Postdoctoral Engineering Education Researcher)  
Center for the Advancement of Scholarship in Engineering Education  
National Academy of Engineering

Duties: Develop and maintain a set of resources for engineering education researchers: Annals of Research on Engineering Education, Change and Awareness Necessary for Global Engineering, DISTILATE digest, and the Research Into Practice Series. Conduct associated research into the utility of these resources to the engineering education research community.

May 2007 –  
April 2008

AGEP PEER (Postdoctoral Engineering Education Researcher)  
Center for the Advancement of Scholarship in Engineering Education  
National Academy of Engineering

Duties: Conduct research into retention/persistence issues, with concentration on the retention/persistence of female undergraduate engineering students.

January 2007 –  
May 2007

Adjunct Faculty  
Department of Systems and Information Engineering, University of Virginia

Duties: Teach SYS 204, Data and Information Management, and SYS 613/STAT 513, Applied Multivariate Statistics. Supervise two TAs. Assist with departmental initiatives as needed.

August 2000 –  
May 2006

Graduate Research and Teaching Assistant  
Department of Systems and Information Engineering, University of Virginia

Duties: As an RA – perform basic and applied research tasks in the areas of systems and computer engineering (system validation and verification; system-level quality assurance/quality control); as a TA – grade homework, maintain class web site, administer exams, counsel and guide students, hold office hours, lead discussion groups, and deliver lectures. I was the TA for the then-core graduate courses SYS 601 (Fall 2001; Benjamin S.

Blanchard, adjunct), SYS 603 (Fall 2000; Roman Krzysztofowicz, Ph.D.), and SYS 605 (Fall 2000; K. Preston White, Jr., Ph.D.); for the introductory undergraduate course, SYS 201 (Fall 2005; Garrick Louis, Ph.D. and Michael C. Smith, Ph.D.); and for SYS 730, Time Series Analysis (Ginger M. Davis, Ph.D.).

1981 – 1991                      Teacher and Counselor

Duties:                      Academic counselor, School of Arts and Sciences, University of Pittsburgh; taught a semester-long orientation seminar for new students in the College of Arts and Sciences, University of Pittsburgh; full-time teacher (Theology 2 and 3, Office Skills, Computer Science 1 and 2, and Algebra 1 and 2) at high schools in Florida and Virginia; part-time (evening) position at J.R. Tucker High School, Richmond, Virginia, working in adult education and high school dropout prevention programs teaching Government, American History, and English.

*Conference Presentations and Publications* (in chronological order; \* indicates an undergraduate student and + a peer-reviewed conference paper)

+Susan K. Donohue (2000). “Identification and Parameterization of Execution Metrics: Initial Steps in Creating a Tool for Software Quality Management.” Student Poster (with travel award) at ISSRE 2000.

+Susan K. Donohue and Yangyang Yu (2001). “Developing a Probabilistic SRE Self-Assessment Tool Using BBNs.” In the *Supplemental Proceedings* of the 12th International Symposium on Software Reliability Engineering (ISSRE 2001), pp. 232 – 236. Also a Student Poster (with travel award) at ISSRE 2001.

+Yangyang Yu and Susan K. Donohue (2001). “Using Certainty Factors to Estimate the Number of Tests in Dependability Analysis.” *Ibid.*, pp. 237 – 239. Also a Student Poster (with travel award) at ISSRE 2001.

+Susan K. Donohue and Joanne Bechta Dugan (2002). “Assessing the Results of System Safety Validation Using BBNs.” In the *Proceedings* of the 6th International Symposium on Probabilistic Safety Assessment and Management (PSAM6 - 2002).

+Ganesh J. Pai, Susan K. Donohue, and Joanne Bechta Dugan (2002). “Estimating Software Reliability from Process and Product Evidence.” In the *Proceedings* of the 6th International Symposium on Probabilistic Safety Assessment and Management (PSAM6 - 2002).

Leila Meshkat, Liudong Xing, Susan K. Donohue, and Yong Ou (2002). “An Overview of the Phase-Modular Fault Tree Approach to Phased Mission System Analysis.” Presented at the

inaugural Space Mission Challenges – Information Technology (SMC-IT) conference in July, 2002.

+Susan K. Donohue and Joanne Bechta Dugan (2003). “Modeling the “Good Enough to Release” Decision Using V&V Preference Structures and Bayesian Belief Networks.” In the *Proceedings* of the Annual Reliability and Maintainability Symposium, pp. 568 – 573.

Susan K. Donohue and Joanne Bechta Dugan (2003). “Is My Computer-Based System ‘Good Enough?’” Presented at the Sixth Annual Assurance Technology Symposium, June, 2003.

+Susan K. Donohue, Joanne Bechta Dugan, Jan Railsback, and Henk Roelant (2004). “Determining Evaluation Criteria for a ‘Seal of Approval’ Process for Probabilistic Risk Analysis Tools.” In the *Proceedings* of the Annual Reliability and Maintainability Symposium, pp. 466 – 473.

\*Jeanna Chang, \*Will Gibson, \*Emma Lander, \*Kelly O’Hargan, Susan Donohue, and Stephanie Guerlain; Brian Clark and B. Eugene Parker (2004). “Assessing Individual and Team Readiness.” In the *Proceedings* of the IEEE Systems and Information Engineering Design Symposium. (The related poster won third place in the SIEDS 04 Poster Competition.)

Stephanie Guerlain, \*Kelly O’Hargan, \*Emma Lander, \*Will Gibson, \*Jeanna Chang, and Susan Donohue; B. Eugene Parker and Brian Clark (2004). “Predicting the Cognitive Readiness of Army Search and Rescue Teams.” In the *Proceedings* of the IEEE Conference on Systems, Man, and Cybernetics, pp. 5515 – 5519.

Susan K. Donohue and Joanne Bechta Dugan (2005). “Is My Software ‘Good Enough’ to Release? – An Assessment Methodology.” In the *Proceedings* of the 29<sup>th</sup> Annual IEEE/NASA Software Engineering Workshop (SEW-29), pp. 5 – 13.

\*Pavel Fomin, \*Mark McCarron, \*Shawn Menz, \*Charles (Alex) Scott, Susan K. Donohue, Garrick E. Louis, and Michael C. Smith; Gulu Gambhir, Jakob Harmon, Derald Lane, David Ott, and Trey Spetch (2005). “Developing a Parametric Design Tool for Lighter than Air Vehicles.” In the *Proceedings* of the IEEE Systems and Information Engineering Design Symposium.

+Liudong Xing and Susan K. Donohue (2005). “An Approach to the Reliability Analysis of Hierarchical Computer-Based Systems Subject to Common-Cause Failures.” In the *Proceedings* of the International Conference on Quality and Reliability, pp. 501 – 507.

+Liudong Xing, Leila Meshkat, and Susan K. Donohue (2006). “An Efficient Approach for the Reliability Analysis of Phased-Mission Systems with Dependent Failures.” In the *Proceedings* of the 8th International Symposium on Probabilistic Safety Assessment and Management (PSAM8 - 2006).

+Susan K. Donohue, Garrick E. Louis, William T. Scherer, Michael C. Smith, K. Preston White, Jr., and Peter A. Beling (2006). “An Innovative Model for the Administration of Undergraduate Capstone Projects.” In the *Proceedings* of the 113<sup>th</sup> ASEE Conference and Exposition.

+Susan K. Donohue and Carolyn Vallas (2006). “Building the Engineer in Me: Designing a Seminar for First-Year Female Engineering Students.” In the *Proceedings* of the 113<sup>th</sup> ASEE Conference and Exposition.

+Carolyn Vallas and Susan K. Donohue (2007). “Identifying Factors Affecting Persistence Rates Among Undergraduate Engineering Students from Underrepresented Populations.” In the *Proceedings* of the 114<sup>th</sup> ASEE Conference and Exposition.

Poster presentation, “The Optimal Retention Strategy Bundle Assessment (ORSBA) Methodology,” NAE/CASEE Dane and Mary Louise Miller Symposium, Milwaukee, Wisconsin, 9 October 2007.

+Susan K. Donohue and Larry G. Richards (2007). “Work in Progress: Encouraging Cooperative Learning in Graduate Engineering Statistics Courses.” In the *Proceedings* of the 37<sup>th</sup> Frontiers in Education Conference, pp. T1D-14 – T1D-15.

+Reid Bailey and Susan K. Donohue (2008). “Engaging Middle School Students in Engineering: The Robotics System Design Camp – Nature as Inspiration.” In the *Proceedings* of the 115<sup>th</sup> ASEE Conference and Exposition.

+Susan K. Donohue, Larry G. Richards, and Carolyn Vallas (2008). “Factors Supporting Persistence of Females in Undergraduate Engineering Studies: Insights Gained Through a Qualitative Analysis of Consistently Performing Programs.” In the *Proceedings* of the 115<sup>th</sup> ASEE Conference and Exposition.

+Susan K. Donohue and Larry G. Richards (2008). “Workshop - Elementary Engineering Education: Engineering Teaching Kits for K – 5 Students.” In the *Proceedings* of the 38<sup>th</sup> Frontiers in Education, pp. W3-1 – W3-2.

Larry G. Richards, Christine Guy Schnittka, and Susan K. Donohue (2009). “Engineering in K - 12 Education: Learning Science and Mathematics through Guided Inquiry, Conceptual Restructuring, and Engineering Design.” Session presented at the 2009 ASEE Workshop on K – 12 Engineering Education, Saturday, 13 June 2009.

+Susan K. Donohue and Larry G. Richards (2009). “Factors Affecting Student Attitudes Towards Active Learning Activities in a Graduate Engineering Statistics Course.” In the *Proceedings* of the 39<sup>th</sup> Frontiers in Education, M4G-1 – M4G-6.

+Susan K. Donohue and Larry G. Richards (2009). “Workshop - K-12 Engineering Education: Design Challenges for Pre-College Students.” In the *Proceedings* of the 39<sup>th</sup> Frontiers in Education, pp. S1C-1 – S13.

+Susan K. Donohue, Christine Guy Schnittka, and Larry G. Richards (2010). “The Constructivist-Based Workshop: An Effective Model for Professional Development Training Activities.” In the *Proceedings* of the 117<sup>th</sup> ASEE Conference and Exposition.

+Susan K. Donohue, Christine Guy Schnittka, and Larry G. Richards (2010). “P-12 Engineering Education: Using Engineering Teaching Kits to Address Student Misconceptions in Math and Science.” Scheduled to appear in the *Proceedings* of the 40<sup>th</sup> Frontiers in Education Conference, pp. W2B-1 – W2B-3; workshop was cancelled due to low enrollment.

+Susan K. Donohue (2010). “Work in Progress: Identifying Undergraduate Courses Which Develop and Enhance Spatial Abilities.” In the *Proceedings* of the 40<sup>th</sup> Frontiers in Education Conference, pp. F4E-1 – F4E-2.

Susan K. Donohue, Christine Guy Schnittka, and Larry G. Richards (2011). “P-12 Engineering Education: Using Engineering Teaching Kits to Address Student Misconceptions in Science.” Mini-workshop accepted for the 41<sup>st</sup> Frontiers in Education Conference.

Susan K. Donohue (2011). “Effectiveness of Technology Education Learning Activities on the Improvement of Spatial Skills.” Accepted for the 41<sup>st</sup> Frontiers in Education Conference.

Susan K. Donohue, Christine Guy Schnittka, and Larry G. Richards (2011). “What was THAT Again? The Role of Discrepant Events in Identifying Student Misconceptions in STEM.” Session presented at the 2011 ASEE Workshop on K – 12 Engineering Education, Saturday, 25 June 2011.

#### *Journal Publications*

Susan K. Donohue, William T. Scherer, and K. Preston White, Jr. (2006). “Practical Undergraduate Education in Information Systems and Operations Management: The Capstone Experience at the University of Virginia.” In the *International Journal of Information and Operations Management Education* 1(3), pp. 213 – 230.

Susan K. Donohue (2007). “A Proposed Basic Model for the Probabilistic Assessment of the Performance Quality of Computer-Based Systems.” A short communication in the *International Journal of Performance Engineering* 3(2), April 2007.

Liudong Xing, Leila Meshkat, and Susan K. Donohue (2007). “An Approach to the Reliability Analysis of Hierarchical Computer-Based Systems Subject to Common-Cause Failures.” In *Reliability Engineering and Safety Science* 92(3), March 2007, pp. 351 – 359.

#### *Journal Publications in Development*

Susan K. Donohue. “The Role of Resilience in the Persistence of Female Undergraduates in Engineering.” In preparation for submission to the *Journal of Engineering Education*.

Susan K. Donohue. “Factors Considered in Decisions to Implement Programs and Strategies Promoting Persistence of Female Undergraduates in Engineering.” In preparation for submission to the *Journal of Engineering Education*.

Susan K. Donohue and Larry G. Richards. “Graduate Engineering Students’ Attitudes Towards Participation in Group Learning Activities: An Investigation in a Graduate Statistics Course.” In preparation for submission to the *Journal of Engineering Education*.

#### *Monograph*

Susan K. Donohue (2010). “*Good Enough*” to Release. Saarbrücken, Germany: Lambert Academic Publishing. (ISBN 978-3-8433-8378-3)

#### *Magazine Article/Essay*

Susan K. Donohue (2010). “Last Word: An Alternate Retention Strategy.” In *PRISM*, the magazine of the American Society for Engineering Education, Summer 2010.

#### *Resources for the Academic and Professional Communities*

Susan K. Donohue (2011). “Spatial Skills: Abstract, Literature Overview, and Information Sheet.” Assessing Women and Men in Engineering (AWEonline.org) Applying Research to Practice series.

#### *Invited Lectures / Presentations*

Presentation to members of the Center for Railroad Safety-Critical Excellence, University of Virginia, 12 June 2002; topic: Modeling the Assessment of V&V Results Using BBN.

Guest lecturer, SYS 455, 4<sup>th</sup> Year Colloquium, 30 October 2003, University of Virginia; topic: An Introduction to Project Management.

Guest lecturer, ENGR 5004, 29 March 2003, Virginia Polytechnic Institute and State University; topic: An Introduction to Fault Tree Analysis.

Facilitator, 2004 August Teaching Workshop for Teaching Assistants, 25 August 2004, Teaching Resource Center, University of Virginia; topic: Teaching Problem-Solving Sessions.

Guest lecturer, Department of Engineering and Science Education Seminar, 30 October 2007, Clemson University; topic: The Optimal Retention Strategy Bundle (ORSBA) Methodology.

Guest lecturer, APMA 643, 7 April 2008, University of Virginia; topic: Statistical Quality Control.

Presenter, Reunions 2008, 7 June 2008, University of Virginia; topic: Nature as Inspiration: The Inaugural Systems Robotics Design Camp.

Guest lecturer, Department of Technological Studies, 5 May 2009, The College of New Jersey; topic: The Role of Technological Literacy in STEM Education

Presenter, Boy Scout Amateur Radio Merit Badge Day, 9 January 2010, The College of New Jersey; topic: Engineer Your Future

Presenter, ENG 470 Systems Engineering, 27 January 2010, The College of New Jersey; topic: The University of Virginia's Version of Systems Engineering

Presenter, ECE Colloquium, 18 February 2011, University of Massachusetts – Dartmouth; topic: Identifying and Remediating Student Misconceptions in STEM Disciplines

### *Grants*

Awarded (with Joanne Bechta Dugan) a NASA Center Initiative entitled "Validation of System Safety Using Bayesian Belief Networks," OSMA FY 02 Operating Plan Task Identification Number 450, which is funded by the NASA Office of Safety and Mission Assurance Software Assurance Research Program. (NAG5-11953)

Awarded, through TechWrite, Inc., a NSF STTR Phase 1 Grant (0441169) for CY 2005 entitled "Investigating, Modeling, and Supporting the 'Good Enough to Release' Decision for Computer-Based Systems." (\$99,899)

### *Miscellaneous*

Professional development student, Curry School of Education, University of Virginia, August 2006 – May 2009.

Team member, Virginia Middle School Engineering Education Initiative, September 2007 – present.

Recipient, Louis T. Rader Outstanding Graduate Student Service Award in Systems and Information Engineering, May 2005.

Proficiency in BASIC, Microsoft Office, Creative Suite 5, iMovie9, and various statistical packages (primarily Minitab); knowledge of Microsoft Access, Maple, LISREL, and NVivo; past experience with CICS, COBOL and JCL.

Previously certified with an endorsement in Government to teach in secondary schools in Florida and Virginia.

### *Other Professional Employment*

August 2006 –  
November 2006      Researcher and Grant Writer  
Center for Diversity in Engineering, University of Virginia

Duties:            Conduct research regarding diversity issues with a focus on the recruitment and retention of students from underrepresented populations in engineering; participate in the preparation of grant proposals for the National Science Foundation (LSAMP, STEP, and S-STEM), the US Department of Education (Upward Bound – Math and Science), and the ExxonMobil and Harris Foundations (ExxonMobil Bernard Harris Summer Science Camp).

August 1998 –  
October 2007      Technical Writer and Facilitator, Manuals Project  
Learning Center – Maintenance Training Academy, Virginia Department of Transportation (funding through the Community College Workforce Alliance, John Tyler and J. Sargeant Reynolds Community Colleges)

Duties:            Create, edit, and maintain training materials; conduct job task studies and training needs analyses; facilitate pilots of training materials; coach and mentor volunteer instructors; perform word processing and graphics tasks; and create and edit reports, web site materials, and other documentation for the VDOT Learning Center - Maintenance Training Academy and other customers within VDOT.

May 1995 –  
December 2009      President, TechWrite, Inc.

Duties:            Create, edit, and maintain system documentation and training materials; conduct needs analyses; conduct training; and perform project management duties for a variety of clients.

1986 – 1994            IT Positions

Duties:            Served as a programmer, systems analyst, quality assurance/quality control analyst, and project leader in several applications at Media General, Sovran/NationsBank, and Virginia Blood Services in Richmond, Virginia.

## *Professional Affiliations and Service/Volunteer/Community Activities*

### **Professional Affiliations**

American Educational Research Association member (since 2007) with current affiliations with the Measurement and Research and Postsecondary Education Divisions and the Constructivist Theory, Research and Practice; Design and Technology; Mixed Methods Research; Qualitative Research; and Systems Thinking in Education SIGs.

American Society for Engineering Education member (since 2004) with affiliations with the Divisions of Education Research and Methods, Engineering and Public Policy, K-12 and Pre-College Engineering, Systems Engineering, Technological Literacy, and Women in Engineering.

Institute of Electrical and Electronics Engineers member (since 2000) with affiliations with the IEEE Computer Society, the IEEE Education Society, and Women in Engineering.

New Jersey Technology Education Association member (since 2009).

### **Service to the School of Engineering and Applied Science at the University of Virginia**

Volunteer graduate researcher and analyst for the Center for Diversity in Engineering, University of Virginia, November 2004 – July 2006 and November 2006 – January 2007.

Volunteer graduate researcher for the Assessing Team Performance Capstone Group (client was Barron Associates, Inc.; faculty advisor was Stephanie Guerlain, Ph.D.), Department of Systems and Information Engineering, University of Virginia, AY 2003 – 2004.

Volunteer graduate student advisor for the Lighter than Air Vehicles (LTAs) Parametric Design Tool Capstone Team (client was Northrop Grumman TASC; faculty advisor was Garrick E. Louis, Ph.D.), Department of Systems and Information Engineering, University of Virginia, AY 2004 – 2005.

Safe Space participant / ally, University of Virginia.

Session Chair for Capstone Conference, Department of Systems and Information Engineering, University of Virginia, April 2002.

Session Chair for SIEDS 03, University of Virginia, April 2003.

Session Chair for SIEDS 04, University of Virginia, April 2004.

Session Chair for SIEDS 05, University of Virginia, April 2005.

Track Judge (#3, HCI) for SIEDS 06, University of Virginia, April 2006.

Session Chair for SIEDS 07, University of Virginia, April 2007.

Lead Session Chair for SIEDS 08 and SIEDS 09, University of Virginia, April 2008 and 2009.

Advisor/Greeter, School of Engineering and Applied Science (SEAS) Open House, University of Virginia, 2004 - 2008.

Advisor, Girls Excited about Math and Science (GEMS), University of Virginia, September 2002 – June 2009.

Past president, secretary, and treasurer of Omega Rho Honor Society, Department of Systems and Information Engineering, University of Virginia; assisted in society's revitalization in May 2000; graduate advisor, May 2002 – present.

INFORMS officer (Representative to the Graduate Committee; Secretary for two years) and member, Department of Systems and Information Engineering, University of Virginia, September 2000 – May 2006.

SEAS First-Year Student Advisor, University of Virginia, AY 2007.

Member, Commonwealth Graduate Engineering Program (CGEP) Advisory Board, April 2003 – April 2007.

Founding member, SEAS Dean's Graduate Student Advisory Board, University of Virginia, February – May 2005.

Developed a TA Orientation for the Department of Systems and Information Engineering, University of Virginia; facilitated the orientation in August for the years 2001 – 2005.

Design team member and program evaluator, Robotics Systems Design Camp, Department of Systems and Information Engineering, University of Virginia, January – July 2007; program evaluator, July 2008.

### **Service to The College of New Jersey**

Department Representative

Planning Committee, TECS/Teentech 2010

TCNJ Open Houses 4 October and 21 November 2009; 20 November 2010

New Jersey Technology Education Association, Spring 2010

Teacher Education Program Council (TEPC), Spring 2010

Undergraduate Research and Design Committee, School of Engineering, AY 2009

Academic Standards Committee, School of Engineering, AY 2010

Vice Chair, Steering Committee, and member of the Board of Directors, The Trenton Computer Festival, 2009 – present.

Supervising Teacher for Student Teacher Field Experiences, AY 2009.

Professional Development Strand Co-ordinator, Department of Technological Studies, Spring 2010.

Master's of Arts in Teaching Co-ordinator, Department of Technological Studies, Spring 2010.

Academic Advisor, Math/Science/Technology majors in the School of Education, AY 2009 and 2010.

TEPC Student Teaching Grading Subcommittee, Spring 2010.

TEPC New Jersey Distinguished Student Teacher Award Selection Committee, Spring 2010.

Phi Beta Kappa Keyholder Selection Committee participant and dyad member, 2010 and 2011;; induction ceremony attendee, 7 April 2010.

Facilitator, Junior – Senior Design Challenge (student outreach), 11 November 2009.

Library Focus Group Member, 18 November 2009.

All-College Academic Integrity Board member, 20 November 2009, 10 February 2011, 25 February 2011, and 10 May 2011.

Judge, Engineering Design Competition, New Jersey Technology Student Association, 2010 and 2011.

Welcome Week Move-In Volunteer, 26 August 2010.

Common Reading Experience Discussion Leader, 30 August 2010.

Academic Integrity Discussion Leader, 25 October and 2 December 2010.

Faculty Advisor, Theta Phi Alpha Sorority, Fall 2010 – present.

### **Service to the Profession**

Registration Chair for ISSRE 2002 (13th International Symposium on Software Reliability Engineering), November 2002.

Program Chair (Elect, 2011 – 2012; Chair, 2012 – 2013) for the K-12 Division, ASEE

Session Moderator

ASEE 2007: Session 3592, Women in Engineering Division

ASEE 2008: Session 2792, At the Institutional Level, Women in Engineering Division

ASEE 2010: Session 1467, Assessment of K-12 Engineering Programs and Issues; 1830, For'um and Agin'em; 3130 Innovative Teaching and Assessment Tools

ASEE 2011: Session W224A, Broadening Participation of Minority Students in and with K-12 Engineering

FIE 2007: Session T3C, Pedagogies I

FIE 2008: Session T4F, Graduate Curricula

FIE 2009: Session M2H, Computing and Engineering in K-12 Programs II

FIE 2010: Session T2H, Diversity

Reviewer for the Benjamin A. Dasher Best Paper/Presentation Award, FIE 2007.

Member, Best Paper Committee, Education Research and Methods Committee, ASEE 2008.

ERM Representative, Benjamin A. Dasher Committee, September 2009 – present; Chair 2010.

ASEE WIED Nominating Committee, 2011

Program Committee member

Security and Dependability Track, 3<sup>rd</sup> International Conference on Embedded Software and Systems (ICISS 2007)

Security, Dependability, and Trustworthy Computing Track, 14<sup>th</sup> IEEE International Conference on Parallel and Dependable Systems (ICPADS 2008)

Autonomic, Reliability and Fault-Tolerance Track, 11<sup>th</sup> IEEE International Conference on High Performance Computing and Communications (HPCC-09)

International Journal of Engineering Education's Special Issue on Applications of Engineering Education Research (2009)

7<sup>th</sup> International Symposium on Wireless Sensor Network Technologies and Applications for Smart Space (WTA 2011)

10<sup>th</sup> International Conference on Algorithms and Architecture for Parallel Processing (ICA3PP-10)

11<sup>th</sup> International Conference on Algorithms and Architecture for Parallel Processing (ICA3PP-11)

Security and Privacy Track, 11<sup>th</sup> International Conference on Parallel and Distributed Computing, Applications, and Technologies (PDCAT-10)

9<sup>th</sup> IEEE International Conference on Dependable, Autonomic, and Secure Computing (DASC 2011)

Reviewer for the following conferences and journals:

AERA 2009 – 2012 (pre-registered)

ASEE 2007 (ERM and WIED), 2008 (EPP, ERM, K-12, and WIED), 2009 (EPP, ERM, K-12, LED, Systems Engineering, and WIED), 2010 (EPP, ERM, K-12, and WIED), and 2010 (ERM, K-12, Systems Engineering, and WIED)

ASEE Southeastern Division 2009

ASEE WIED Apprentice Educators Grant, 2010 and 2011

DASC 2009

FIE 2007 – 2010

ICISS 2007

ICPADS 2008

IEEE Intelligent Systems

IEEE Transactions on Knowledge and Data Engineering

International Journal of Performance Engineering

ISSRE 2003 and 2004

Journal of Aerospace Computing, Information, and Communication

Journal of Computer Science  
Journal of Systems Science and Systems Engineering

General Chair, Integrated STEM Education Conference (ISCE 2011). (co-located with the Trenton Computer Festival 2 April 2011; see [www.tcnj.edu/~sdonohue/isec\\_index.html](http://www.tcnj.edu/~sdonohue/isec_index.html))

Review Panel member, NSF Transforming Undergraduate Education in STEM (TUES) Type 1 proposals, 29 – 30 July 2010 and 25 – 26 July 2011 (scheduled).

### **Service to the Community**

Member of the Daughters of the American Revolution and Alpha Delta Pi Sorority; Life Member of the University of Virginia Alumni Association.

Vice President, UVaClub of Central New Jersey, Fall 2010 – present.

Founder and feline safehouse, Indian Rivers Humane Society, King William County, Virginia, June 1996 – December 2007.

### **Other Awards / Recognition**

Listed in Marquis' *Who's Who in America*, 2006 – 2010.