Joseph S. Mertz Jr.

H. John Heinz III College
& Dietrich College of Humanities and Social Sciences
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Education:

1995	Carnegie Mellon University	Ph.D. in Engineering and Public Policy
1983	University of Southern California	M.S. in Computer Science
1982	Pennsylvania State University	B.S. in Computer Science

Academic Appointments:

Carnegie Mellon University

2018 – present: Director - Information Systems Program

2015 – present: Teaching Professor
Joint appointment:
H. John Heinz III College
Dietrich College of Humanities & Social Sciences
Information Systems Program

2010 – 2015: Associate Teaching Professor
Joint appointment:
H. John Heinz III College
Dietrich College of Humanities & Social Sciences
Information Systems Program

2005 – 2010: Associate Teaching Professor
Joint appointment:
H. John Heinz III College
School of Computer Science

Spring 2009: Associate Teaching Professor
Carnegie Mellon Qatar
Computer Science

Spring 2008: Associate Teaching Professor
Carnegie Mellon Qatar
Computer Science

2002 – 2005: Associate Teaching Professor
Joint appointment:
H. John Heinz III School of Public Policy & Management
School of Computer Science

1996 – 2002: Co-Director
Center for University Outreach

1994 – 1996: Post-Doctoral Fellow
Center for Innovation in Learning

1988 – 1995: Graduate Research Assistant
Department of Engineering & Public Policy

University of Puerto Rico

1986 – 1987: Visiting Professor
Department of Electrical & Computer Engineering

Illinois Benedictine College

1984: Adjunct Instructor
Computer Science

AWARDS:

Mark Gelfand Service Award for Educational Outreach – 2012

Annual University honor for sustained, effective community service with academic coursework to enhance learning, and teach social responsibility.

Nominated for the Martcia Wade Teaching Award – 2012

H. John Heinz III College award for outstanding teaching.

TEACHING EXPERIENCE:

Carnegie Mellon University

Information Systems Consulting Project (2014-present)

A team-based 3rd year project course in Information Systems. Projects advised include:

Moonshot Project (2025)
The students developed a cloud-based backup system and enhanced the mission control database to improve monitoring and commanding of space experiments for CMU's MoonRanger lunar rover project.

First Tee Pittsburgh (2024)
The students created an application that allows coaches to quickly send mass text and email notifications to participants when weather forces class cancellations.

Yam Education (2023)
Implemented a student information system to streamline Yam Education's admissions process and create centralized communication and advising capabilities for their virtual educational platform.

Red Cloud Indian School (2022)
Worked to increase children's interest and use of the Lakota language by providing its localization in Minecraft.

Dietrich College Advancement (2021)
Created a website and automated the process of capturing organizational partner information into Salesforce, helping them expand their network and public presence.

NOAA Kodiak Lab (2018)
Developed a web app to simplify analysis of crab fishery data by NOAA's Kodiak Lab researchers.

KidLift (2018)
Revamped KidLift’s website design and integrated AcuityScheduling into their business processes.

Carnegie Mellon University Libraries (2018)
Created are a system deployed on CMU infrastructure that hosts Oscar Micheaux films for download and streaming and allows students to upload their own film project

San Francisco Department on the Status of Women (2017)
Built a solution to improve data collection from grantee programs.

Kodiak Island Borough School District (2017)
Built a solution to allow the school to flexibly schedule students into classes every two weeks.

Blue Sky Fund (2017)
Enhanced the Oppia online lesson platform to meet the needs of the Blue Sky Fund, and fed the changes into the Oppia open source community.

SwiftCeipt (2016)
Created a desktop-focused web application to extend the startup company’s user base past iOS users and to provide additional administrative capabilities for small business owners who are the company’s target audience.

United Mitochondrial Disease Foundation (2016)
Designed and developed a new Path To A Cure donation site with custom animation and graphics.

Software Engineering Institute (2016)
Developed an application to simplify creating training data from video for the SEI’s Computer Vision Machine Learning System.

Phipps Conservatory Member Card App (2015)
Developed a hybrid mobile app to replace the paper membership card given to Phipps Conservancy members. Tied the app into their back-office membership data.

Pittsburgh Parks Conservancy Mobile App (2015)
Developed parallel Android and iOS mobile apps for use by Pittsburgh Parks patrons. The apps provide park information, points of interests, events and interactive park maps.

Pittsburgh Kindness Initiative Web Site (2015)
Created a website for the Pittsburgh Kindness Initiative where users can read, share, and search kindness stories, with trackable cards that link related acts of kindness together.

CMU Center for Innovation and Entrepreneurship Alumni Engagement (2015)
Developed a solution built within the Canvas Learning Management System to allow alumni of the *Marketing for Entrepreneurship* class to have continued access to course materials and stay engaged with the Center for Innovation and Entrepreneurship.

Gelfand Center Background Check System (2014)
Developed a web application to manage criminal background checks and clearances to work with children.

Coaching Logistics Prototype (2014)

Developed a mobile web app prototype for managing children's sports teams, enabling coaches and parents to coordinate player transportation, attendance, and carpools.

Technology Consulting in the Community / IT Consulting (1998-2018)

Undergraduate / graduate versions of the same service-learning course.
Advised > 500 student consulting engagements with > 250 unique nonprofit organizations.

Distributed Systems for Information Systems Management (2010-2023)

Core requirement in Master of Information Systems Management program
Co-taught; typically ~150 students each fall, ~150 each spring

Mobile to Cloud: Building Distributed Applications (2010-2017)

Undergraduate Information Systems technical elective

Technology for International Development (2010-2017)

Graduate seminar-style mini-course for public policy and information systems students

Information Systems Applications

A team-based 4th year project course in Information Systems. Projects advised include:

Placebook (2013)
Advised a student team developing a system to collect and make available geographic information about students, faculty, staff, and alumni in the Carnegie Mellon community. Information would be drawn from multiple social media sites and university sources.

Advanced Projects in Information Systems

Course for students interested in further development of Information Systems Applications projects. Projects advised include:

ScottyGo! (2014)
Supervised two students continuing the *Placebook* project (see below), with a new name, to create an API to collect and make securely available geotagged information about the Carnegie Mellon community of students, staff, faculty, and alumni.

Systems Synthesis I

A team-based graduate project course in Public Policy. Projects advised include:

National Innovation System for Ghana's ICT Sector (2012)
Used a national innovation systems analytical framework to create policy recommendations toward developing the information and communications technology sector in Ghana.

Designing a Global Technology Consulting Corps (2009)
Students researched stakeholder needs and program operations for the Technology Consulting in the Global Community program, then provided recommendations for branding, marketing, and expanding the program.

Client: United Nations Development Programme (UNDP) Equator Initiative (2007)
Students performed a needs analysis and created a functioning web site for the UNDP Equator Initiative and their development partners worldwide to create a multi-lingual space for sharing information concerning ecologically sound grassroots development projects.

Client: Transparency International (2008)
Students investigated the feasibility of taking an empirical approach in detecting government corruption. They developed and tested a risk assessment model using structural data, and an early warning model using event data.

Information Systems Project

A team-based graduate project course in Information Systems. Projects advised include:

Client: United Way of Allegheny County (2011)
Students developed a mobile damage assessment system for disaster volunteers that works offline and syncs data to a server when reconnected, with export capabilities for United Way's legacy system.

Client: ScholarLeads (2010)
Students developed a business plan and prototype for ScholarLeads, a Social CRM platform designed to help higher education institutions engage and track prospective students throughout the admissions process.

Client: Deloitte Consulting (2009)
Students created a whitepaper regarding the use of cloud computing in government and developed a prototype cloud-based software-as-a-service solution for a federal government client of Deloitte Consulting.

Client: McDowell County, WV (2005)
In partnership with the Center for Appalachian Network Access, students developed the McDowell County Online Business Center. The web site was a centralized resource for employment aid, information, and tools intended to help employment agencies in McDowell County provide better service to its citizens.

Client: Greater Pittsburgh Community Food Bank (2004)
Students developed a hand-held wireless solution for managing scheduling and invoicing for the Three Rivers Table program in which drivers pick-up and deliver prepared food from restaurants and grocery stores and deliver it to food pantries and shelters. This system went into production use in F'04 and was then replicated in other cities.

Client: Hunger Services Network (2003)
Students reengineered an information system for the Hunger Services Network while also investigating the information needs of a loose network of several hundred food pantries.

Independent Study

Individual MISM student project (2014)
Student developed a web app to allow adding and displaying comments to online video content, while exploring new client-side single-page web frameworks and the MEAN (Mongo-Eclipse-Angular-Node) development stack.

Individual IS student project (2011)
Student developed node.nat, a system that enables multiple students to deploy node.js projects on a shared server by automatically redirecting ports to avoid conflicts.

Group project (2007)
Students joined the United Nations Development Programme (UNDP) Equator Initiative System Synthesis project team to provide specialized technical capacity to the project.

Individual MISM student project (2007)
Student developed a Customer Relationship Management (CRM) system within SalesForce for managing community partners for the 15-391 and 95-822 classes.

Individual CS student project (2005)
Student investigated how the consulting model taught in 15-391 could be expanded to provide virtual consulting to a remote client. Information he gathered on the primacy of building relationships in the remote case have been incorporated into the course for students working face-to-face.

MSIT Project Course for GM student (2004)
Student adapted a commercial, off the shelf solution to consolidate document management and work process control across his and two peer organizations.

Individual MISM student project (2003)
Student created a curriculum module suitable for use in 95-712 and 95-713 for teaching about J2ME, J2EE, and JDBC (i.e. mobile device, talking to servelet, talking to a database).

Team student project (2003)
Students used contextual inquiry methods to revise a part of my 15-391 curriculum. The project extended into summer in which 3 students were taught a revised experimental version of the course.

MSIT Project Course for GM student (2003)
Student lowered operating costs by repurposing and consolidating servers in an outsourcing environment.

Technology and Policy for Disaster and Humanitarian Response **(2006-2007)**

Technology and Global Development **(2006-2008)**

Technology for Developing Communities **(2005-2007)**

Object Oriented Programming in Java **(2002-2003)**

Intermediate Java II **(2003-2004)**

The Information Systems Milieux **(2002-2003)**

Previous teaching experience

Carnegie Mellon University Center for University Outreach **Co-Director**

(1997-1999) Tutoring, Mentoring, and Role-Modeling: A Community Service Course

(1997-2000) WebBuilders Workshop: a project-based educational after-school program

Westmoreland County Community College

(1990-1991) Developed computer-based tutor in circuit-board assembly

University of Puerto Rico **Visiting Professor**

(1986-1987) Computer Operating Systems

Illinois Benedictine College **Adjunct Instructor**

(1984) Co-taught Compiler Design

Educational Program Development:

Technology Consulting in the Global Community ***(2004-present)***

Developed and Directed Technology Consulting in the Global Community (TCinGC.org) as a program that enables students to provide valuable technical consulting assistance to government ministries, schools, and nonprofit organizations in communities worldwide. 178 students have helped 61 organizations in 14 countries while developing their leadership, intercultural communication, and project management skills.

Research Experience:

Publications / Conference Proceedings:

Moussawi S., Mertz J., Heimann, L., Peopping J., Pottmeyer L., Melville M., Quesenberry, Barrett M., J., Sooriamurthi, R., Kowalsky C. (2026); “How the Focus on the People Dimension in IS Helps Create a Scalable Service-Learning Model”, International Journal of Innovation in Education.

Moussawi, S., Mertz, J., Quesenberry, J., Tu, X., Poepping, J., Heimann, L., Sooriamurthi, R., Liginlal, D., Kowalsky, C., Barrett, M., Gongora-Svartzman, G., Veliz, O., Pottmeyer, L., & Melville, M. (2024). Building Future Information Systems Leaders: The Crucial Role of

Problem Scoping in Service-Learning Experiences. Communications of the Association for Information Systems, 55, 946-977. https://doi.org/10.17705/1CAIS.05536

Barrett, M., Hershock, C., McCarthy, M., Melville, M. and Mertz, J. 2021. What Type of Debrief is Best for Learning during Think-Pair-Shares? . *Teaching Learning Inquiry*. 9, 1 (Mar. 2021), 45–60. DOI: https://doi.org/10.20343/teachlearninqu.9.1.5.

Michael J. McCarthy, Joseph Mertz, Martin L. Barrett, and Michael Melville. 2019. Debriefing Lab Content Using Active Learning. In Proceedings of the 50th ACM Technical Symposium on Computer Science Education (SIGCSE '19). ACM, New York, NY, USA, 1258-1259. DOI: https://doi.org/10.1145/3287324.3293843

J. Mertz and J. Quesenberry, "A scalable model of community-based experiential learning through courses and international projects," 2018 World Engineering Education Forum - Global Engineering Deans Council (WEEF-GEDC), Albuquerque, NM, USA, 2018, pp. 1-6. DOI: 10.1109/WEEF-GEDC.2018.8629695

Mertz, Joseph, Randy Weinberg, Jin Seop Kim, and Alimou Bah. 2013. *A Consulting Model of Global Service Learning.* In Proceedings of the Nineteenth Americas Conference on Information Systems (AMCIS 2013) (Chicago, Illinois, USA, August 15-17, 2013)

Mertz, J. and McElfresh, S. 2010. *Teaching communication, leadership, and the social context of computing via a consulting course*. In Proceedings of the 41st ACM Technical Symposium on Computer Science Education (Milwaukee, Wisconsin, USA, March 10 - 13, 2010). SIGCSE '10. ACM, New York, NY, 77-81. DOI= http://doi.acm.org/10.1145/1734263.1734291

Mertz jr., Joseph and Belousov, Sarah. 2008. *Building Human Technical Capacity in Government Ministries* Paper presented at the Pacific Telecommunication Council annual conference PTC'08, January, in Honolulu, Hawaii, U.S.A.

Dias, M. B., MillsTettey, G. A., and Mertz, J. 2005. The TechBridgeWorld initiative: broadening perspectives in computing technology education and research. In Proceedings of the international Symposium on Women and Ict: Creating Global Transformation (Baltimore, Maryland, June 12 - 14, 2005). CWIT '05, vol. 126. ACM Press, New York, NY, 17.

Fuller, U., Amillo, J., Laxer, C., McCracken, W. M., and Mertz, J. 2005. Facilitating student learning through study abroad and international projects. SIGCSE Bull. 37, 4 (Dec. 2005), 139-151.

Mertz jr., Joe (2004) *Technology Consulting in the Global Community*. Paper presented at the 2004 conference of the Pacific Telecommunications Council (PTC'04), Honolulu, HI.

Mertz, J.S. (1997). Using A Simulated Student for Instructional Design, *International Journal of Artificial Intelligence in Education,* 8, (to be printed, available on the World Wide Web).

Mertz, J. S. (1995). *Using A Simulated Student for Instructional Design*. Paper presented at the Seventh World Conference on Artificial Intelligence in Education (AI-ED '95), Washington, D.C.

Mertz, J. S. (1995). *Using a Cognitive Architecture to Design Instructions*. Doctoral dissertation, Carnegie Mellon University.

Research Contracts:

DiabetesWorld: A Web Site By and For Teens with Diabetes, Co-Primary Investigator, Cochrane-Weber Endowed Fund in Diabetes Research, $34,000 (2001-2002)

Japanese Courseware, Co-Primary Investigator, Carnegie Mellon University, $5,000 (1996)

Assembler Tutorial Workbench, Primary Investigator, Ben Franklin Technology Center of Western Pennsylvania, $26,000 (1989-1990)

Educational / Research Software Developed:

Profile Editor (1996-1997) A tool for helping teenagers design an extended personal profile, as part of a process of creating a resume, reflecting on their life plans, and developing writing and computer literacy.

Tangobako (1994 - 1997) A multimedia tool to aid vocabulary acquisition for early students of Japanese.

Assembler-Soar (1991 - 1994) A simulated-student used to design instructions for circuit-board assembly. This computational cognitive model is built in the Soar cognitive architecture.

Soar-Sockets (1992-1994) A package that enables Soar models to communicate via sockets with other processes.

Assembler Tutorial Workbench (1989-1991) A computer-based simulation and tutor for learning to assemble printed circuit boards.

Presentations / Panels:

International Collaborations for Peace Engineering: Invited speaker and panel leader for the 2018 World Engineering Education Forum - Global Engineering Deans Council (WEEF-GEDC), Albuquerque, NM, USA, 2018.

A Consulting Approach, Invited presentation for the ACM SIGCAS Symposium on Computing for the Social Good: Educational Practices, Memphis, TN, March 2, 2016.

Computing for the social good and cultivating cultures for ethical computing, ACM SIGCAS Symposium on Computing for the Social Good: Educational Practices, Kansas City, MO, March 4, 2015.

Leveraging students sharing technical skills to achieve effective and efficient solutions in International Development, the 21st Annual International Development Conference, Harvard Kennedy School of Government, April 12, 2014.

Mertz, J., McElfresh, S., Andrianoff, S., and Dempsey, J., *Killing 3 Birds with One Course: Service Learning, Professional Writing, and Project Management*, Workshop presented at the 43rd ACM Technical Symposium on Computer Science Education (SIGCSE 2012), Feb 29 – Mar 3, 2012, Raleigh, NC, USA.

Sterling, R., Mertz, J., and Hosman, L., *Sharing Best Practices in ICTD Academic Programs*, Special Session accepted to the Fifth International Conference on Information and Communication Technologies and Development (ICTD2012), Mar 12-15, 2012, Atlanta, GA, USA.

Advancing Technology Based Development in Pittsburgh, moderated a panel hosted by the Carnegie Mellon H. John Heinz III College Center for Economic Development, http://heinz.cmu.edu/news/news-detail/index.aspx?nid=1178

Where's Babeldaob? Sending Students Abroad as a Global Technology Consulting Corps, Carnegie Mellon University Lecture Series, 19 November 2009.

ICT Application and Content Development , Invited presentation, Pacific ICT Ministerial Forum: Connecting the Unconnected, 17-20 February 2009, Nuku'alofa, Tonga.

Pacific Case Studies: Development Issues and Requirements, Panel Chairperson at the 2008 Mid-year Conference of the Pacific Telecommunications Council, September 14, 2007.

ICT for Development, Panel Chairperson at the 2007 Conference of the Pacific Telecommunications Council (PTC'07), January 15, 2007

Ripple Effects: Increasing the Diversity of Creators and Consumers of Computing Technology, Panel at the Grace Hopper Celebration of Women in Computing, October 6, 2006.

Computing and Community: Developing Computing Solutions to Meet Community Needs, Panel at the Grace Hopper Celebration of Women in Computing, October 6, 2006.

Building sustainable solutions in nonprofit organizations, Guest speaker, Service-Learning Seminar of Teams in Engineering Program at University of California – San Diego, October 6, 2006.

Service-Learning Projects: Opportunities and Challenges, Panel session at the 37th Technical Symposium on Computer Science Education (SIGCSE 2006), March 2, 2006.

Technology Consulting in the Global Community. Paper presented at the 2004 conference of the Pacific Telecommunications Council (PTC'04), Honolulu, HI.

DiabetesWorld : Social Support for Adolescents on the Web, by Siminerio, L., Rosenthal, B., Charron-Prochownik, D., Burkett, A., Mertz, J., & Poole, C. Children's Hospital of Pittsburgh, Carnegie Mellon University and the University of Pittsburgh, Poster Session: 9th Annual American Telemedicine Association Meeting, May 2-5, 2004.

Developing Leadership in Integrating Technology Into Your Organization, CTCNet Leadership Development Institute, March 22, 2001

Project-Based Learning With Technology, Three Rivers Educational Technology Conference, March 4, 1999

Generating Revenue for you Center and Your Users, Community Technology Centers' Network (CTCNet) Conference, June 18, 1999.

Partnership Pitfalls & Opportunities: Connecting with Universities, Local Government, and Business, Community Technology Centers' Network (CTCNet) Conference, June 19, 1999.

Smart Investments in Community Technology, An invited seminar for Grantmakers of Southwestern PA, June 8, 1999

Community Based Learning, Eberly Center for Teaching Excellence Faculty Seminar Series, March 31, 1999.

Using Technology as a Catalyst for Intergenerational, Intercultural, Community Dialogue About Working, Community Technology Center Network (CTCNet) 6th Annual All-Affiliates Conference, June 14, 1997

Using a Cognitive Architecture to Design Instructions , Center for Education in Learning Education Seminar Series, February 17, 1995

Instructional Design Informed by a Model of the Acquisition Process, Presentation to the Eleventh Annual Pitt-CMU Conference on Psychology, University of Pittsburgh, July 16, 1993.

Implications of Data Chunking for Instructional Design; Presentation to the Twelfth Soar Workshop, University of California, June 5, 1993.

What Soar Says about Training for Manufacturing Skills, Presentation for the Engineering and Public Policy Graduate Seminar Series, Carnegie Mellon University, November 5, 1992.

Deliberate Learning from Instruction in Assembler-Soar, Presentation to the Eleventh Soar Workshop, Carnegie Mellon University, October 24, 1992.

Experience in the Design, Implementation, and Pilot Testing of an Intelligent Tutoring System in Adult Educational Training, Presentation to the Center for the Design of Educational Computing, Carnegie Mellon University, April 4, 1991.

Previous research experience

DiabetesWorld **Principal Investigator**

(2000-2002) With colleagues at Children's Hospital of Pittsburgh, developed and assessed the value of a web-based community of mutual therapeutic support for teenagers with diabetes. A team of teen web editors, who themselves have diabetes, were trained and built a web site that was used by other teens with diabetes in a controlled experiment.

Carnegie Mellon University **Post Doctoral Fellow**
Center for Innovation in Learning

(1994 - 1996) Applied cognitive science research in a variety of disciplines to improve higher education instruction. Specific projects included an effort to better teach analytical skills to students of world history; the design of a computer-based tool to help students improve their Japanese vocabulary; and documenting the use of community projects within academic courses. Also continued previous thesis research into the use of cognitive-architecture based simulated students to design instruction.

Carnegie Mellon University **Graduate Student**
Department of Engineering & Public Policy

(1988 - 1995) In my thesis research, I demonstrated how a cognitive architecture could be used in a cognitive engineering approach to designing instruction for occupational training. I developed a simulated student in the Soar cognitive architecture, and used it to interactively debug instruction for teaching circuit board assembly.

Prior Higher Education Administration Experience:

Carnegie Mellon University **Co-Director**
Center for University Outreach

(1996-August 2002) Responsible for initiating and supporting collaborative projects and courses between the University and the local community. Focus is on developing community organizations' capacity to use information technology and expanding the involvement of the University faculty and students in mutual learning projects in the community.

Development Experience:

Raised over $1.6M in gifts for student outreach and service activities locally and globally.

Xue and Wei Family Endowed Fund pledged for TCinGC - $250,000 (2025)

Wallace Fund for TCinGC – $100,000 (2015-2018)

Indrani Mondal, CS 2004, HNZ 2007, Travel Support Fund - $50,000 endowment (2017)

Ray Lane – $15,000 (2016)

Don Shepard - $50,000 endowment (2016)

Kumar Family Endowed IS Projects Abroad Fund - $52,000 endowment (2014)

Egerman Family Foundation – Multiple gifts (2003: $100K, 2004: $120K, 2006: $120K, 2007: $120K, 2008: $90K, 2009: $85K, 2010: $55K, 2011: $50K) to support outreach activities for students via the Technology Consulting in the Global Community program and similar programs.

Secretariat for the Pacific Community – $3,500 in summer 2009 to support students consulting in the Republic of Niue.

Robert Walp – Gift of $12K in fall 2008 to support the Technology Consulting in the Global Community program.

Anonymous donor – One gift to support development of community partner recruiting brochure and web site, $2,300 (2007).

International Telecommunications Union – One contract (2004: $5430) to support the Technology Consulting in the Global Community program.

Alcoa Foundation – One gift to support outreach activities, $33,000 (2001)

R.K. Mellon Foundation – One gift to support teenager career and life planning in nonprofit community organizations ($75K) (1999)

Heinz Endowments – Two gifts directly to Carnegie Mellon, and one in cooperation with the Community House, to support teenager career and life planning with community organizations and schools, and to support a teen-designed community technology studio. (Total: ~$170K) (1998-2000)

Pittsburgh Foundation – One 2-year gift to support outreach activities to community groups ($90K) (1998)

Industry Experience:

AT&T Bell Laboratories **Member of Technical Staff**

(1988) Managed projects to create a PC-based distributed software development environment. Received an Exceptional Contribution Award for the work.

(1986) Was lead member of technical staff in the support and development of system software and networking in the Summit Facility Computation Center. Received an Exceptional Contribution Award for my work.

(1985) System software debugging and support of the Amdahl UTS operating system (a port of UNIX), coordinated the acceptance testing and installation of new Amdahl 5870 Attached Processor systems.

(1984) Was responsible for the support and development of the C and FORTRAN compilers for UNIX Systems running on IBM System/370 Architecture machines.

Other Professional Contributions

Professional service

Peer reviewer for the 8th International Conference on Information and Communication Technologies and Development (ICTD 2016).

Reviewer for the 5th Undergraduate Conference in Information Systems (UCIS) 2015

Peer reviewer for the ACM Technical Symposium on Computer Science Education (SIGCSE 2012-2015).

Peer reviewer for the 19th Americas Conference on Information Systems (AMCIS 2013).

Curriculum Standards: Drafted language that was included in the Computer Science Curricula 2013: Curriculum Guidelines for Undergraduate Degree Programs in Computer Science (December 20, 2013), produced by the Joint Task Force on Computing Curricula Association for Computing Machinery (ACM) IEEE Computer Society.

Sessions/Workshops/Panels Committee for the 4th International Conference on Information and Communication Technologies and Development (ICTD2010), December 13-16, 2010, Royal Holloway, University of London, UK.

Co-Chair of the Panels and Workshops Committee for the 3rd IEEE/ACM International Conference on Information and Communication Technologies and Development (ICTD2009), April 17-19, 2009, Carnegie Mellon Qatar, Doha, Qatar

Pacific Telecommunications Council Mid-Year 2007 Seminar Steering Committee

Service to the University

Dietrich College Council (2018 – present)

Dietrich College General Education Experiential Learning Sub-Committee (2017 – 2018)

Joint Heinz-Dietrich Undergraduate Information Systems Program Committee (2016 – 2018)

Dietrich College Faculty Organization Chair (2016 – 2018)

University Reappointment, Promotion and Tenure Committee (2016 – 2018)

Heinz Technology Enhanced Learning Committee (2015 – 2016)

Carnegie Mellon International Strategy Working Group (2015)

Member of the University committee that participated in General Education for a Global Century, a curriculum and faculty development project that is part of Association of American Colleges and Universities' (AAC&U) Shared Futures initiative and is funded by the Henry Luce Foundation. (2011-2012)

Service Learning Abroad Faculty Committee (2011-2012)

Member of the Ad-Hoc Committee on the Policy School IT Curriculum (2009-2010)

Member of the Heinz College IT Programs Committee (2003-2007)

CMU Librarian and Archivist Track - Ad Hoc Committee (2003, 2011)

Member of the University Education Council (1999 – 2002)

Advisor to the *East End Youth Projects* student organization (1996-2002)

Participant, university-wide IT strategy workshops (2002)

Advisor to the *Student Technology Outreach Center* student organization (2004-present)

Non-academic Contributions to the Public Interest

Technology Committee member for Pittsburgh CONNECTS, a federally sponsored community-technology project of the Neighborhood Learning Alliance (http://main.pghconnects.org/) (2011-2015)

Community Technology Advisory Committee member for the Wireless Neighborhoods project (http://www.wireless-neighborhoods.org/). (2003-2004)

Technology Advisory Group member for the Bayer Center for Nonprofit Management at Robert Morris University. (2001-2006).

East End Cooperative Ministry: Board member (1989-2002), Vice President and Long Range Planning Committee Chair (1996-1998), President (1998-2002). As president, reorganized the board governance structure and revised the by-laws to correspond with the growth of the organization.

PROFESSIONAL MEMBERSHIPS

ACM – Association for Computing Machinery

SIGCSE – Special Interest Group on Computer Science Education

SIGCAS – Special Interest Group on Computers and Society

AIS - Association for Information Systems