

Debra J. Richardson, Ph.D
Chair, CSEdWeek 2011
Professor of Informatics, Donald Bren School of Information and Computer Sciences

Debra's top priority is ensuring that the program is top-tier, encompassing a broad and interdisciplinary curriculum, while attracting the best and brightest students and faculty.

In addition, she is dedicated to building an infrastructure to support a dynamic research and educational environment that meets the demands of regional industry and community and contributes to the global economy. Richardson was appointed chair of the then-department of ICS in July 2000.

Under her leadership, the department was promoted to the first computing-focused school in University of California history in December 2002. She was named the Ted and Janice Smith Dean of the new school in January 2003. Richardson was instrumental in securing a transformational \$20 million endowment for the school, resulting in naming the school after philanthropist Donald Bren.

Committed to increasing the participation of women and other underrepresented populations in computing and information technology, Richardson serves as director of the Ada Byron Research Center for Diversity in Computing and Information Technology (ABRC), whose mission is to study and promote diverse perspectives in computer science, engineering, digital media and related information technology fields through a variety of research, mentoring and outreach activities.

She is a member of the leadership team of the National Center for Women and Information Technology (NCWIT), whose overarching goal is parity in the professional IT workforce through education, dissemination, advocacy, and a national, multi-year implementation plan that generates tangible progress within 20 years.

Richardson sits on the board of trustees for Girls, Inc., Orange County, a non-profit association devoted to advancing women and girls in computing and technology; the executive advisory board of the Association for Women in Technology, a non-profit organization of women devoted to the advancement of women working in computing and technology; and the board of directors of Watchit Media, a leading provider of narrowcasting technology.

She has worked with several companies in adopting technology for improving the quality of their software products and processes. While on sabbatical in 1996, she directed the Quality Enabling Software Technology (QuEST) study at the Microelectronics and Computer Technology Corporation (MCC). Out of this study, grew the (QuEST) project, whose goal is to study, transition, evaluate, integrate, and improve software testing and analysis tools and technologies for enabling and enhancing software quality. Richardson was recently named to the Board of Directors of Cotelligent, Inc., a leading provider of mobile business solutions, services and wireless hosting based in San Francisco.

She is currently director of MICRO (Microelectronics Innovation and Computer Research Opportunities), the first industry-university cooperative research program in the University of California (about to celebrate it's 20th anniversary). She is also a founding member of the UC Institute for Software Research (an Organized Research Unit). She currently serves UCI on the Committee on Committees and recently served as a member of UCI's Academic Senate Cabinet and as chair of UCI's Council on Educational Policy.

Richardson has served on several program committees, in particular on the series of International Symposia on Software Testing and Analysis (ISSTA and TAV - General Chair in 2000), and the International Conference on Automated Software Engineering (ASE - General Chair in 2001), as well as the ACM SIGSoft Symposium on Foundations of Software Engineering (FSE), the International Workshop on Software Specification and Design (IWSSD - Program Chair in 2000), and the Workshop on Formal Methods in Software Practice (FMSP - General Chair in 2000).

Still an active scholar, Richardson pioneered research in “specification-based testing,” whereby formal methods are employed to guide software testing. Her current work focuses on enabling specification-based testing technology throughout the software lifecycle, from requirements and architecture analysis through operation and evolution. She has developed leading edge tools, and has worked with several companies in adopting technology to improve the quality of critical software systems.

Richardson received her B.A. in Mathematics from University of California, San Diego, with the intention of teaching high school math. She gained an interest in computer science and chose graduate school instead. An urge to leave California (native born and raised) sent her east, planning to get her masters and return to the west coast within two years.

Five years later, she received a Ph.D. in Computer and Information Science (COINS) from the University of Massachusetts, Amherst. Not quite ready to leave, in part

because she was the first string “lock” for the national champion women's rugby team, she joined the COINS faculty as a “visiting” professor. Six years later, she returned home to Orange County and joined the UCI faculty in 1987.

Richardson’s non-academic passions include rock climbing, SCUBA diving, in-line skating, skiing, snow boarding, biking, weight training, and country-western dancing. She enjoys the company of her three dogs: tri-color “chocolate” labs – Zoe (milk), Zuleka (white), and Zacary (dark).

Ruthe Farmer, MBA
Vice Chair, CSEdWeek 2011
Director of Strategic Initiatives
National Center for Women in IT (NCWIT)

Ruthe Farmer has focused her efforts on increasing girls’ participation in technology and engineering since 2001. As Director of Strategic Initiatives at the National Center for Women & IT (NCWIT), she provides strategic planning and direction, fund development, and cultivation of new partnerships for NCWIT. Ruthe represents NCWIT on the Computing in the Core Coalition as Vice-chair of Computer Science Education Week 2011 (she was Project Manager of CSEdWeek 2010).

She oversees efforts to accelerate distribution of NCWIT promising practices and resources throughout the computing community and beyond, and conceived and directs the national scale-up of the Aspirations in Computing talent pipeline initiative. Ruthe has grown the Aspirations in Computing program from the initial regional pilot serving seven young women, to a national program targeted to engage 1000 new girls annually by 2013.

She has personally mentored or facilitated mentoring for thousands of young women in STEM via Girl Scouts, Lego robotics, on behalf of both Lewis & Clark College and the University of Oxford, and now the Aspirations in Computing program.

In a previous position as the National Project Manager for Technology & Engineering Education at Girl Scouts of the USA, Ruthe designed and implemented national programs and partnerships to increase girls’ participation in STEM and managed the K-12 Informal Education Hub of the National Center for Women & IT, and was the founding co-chair of the NCWIT K-12 Alliance.

She has a history of scaling up innovative STEM projects. She was responsible for establishing a national Lego Robotics program at Girl Scouts, scaling out the Intel Design & Discovery engineering program to 63 locations in four countries, and forming a

national partnership between FIRST Robotics and Girl Scouts of the USA. She created GirlFEST, a one-day resource expo celebrating “everything cool about being a girl”. The inaugural event drew 10,000 girls and the event has been replicated in 15 Girl Scout councils and adopted as the girl engagement model at the Triennial Girl Scout convention.

Ruthe developed “On the Road: the Savvy Girl’s Guide to Cars”, a comprehensive program on automotive careers, safety, and maintenance sponsored by Firestone and the US Department of Labor. She received the 2007 Educational Publishing Award for the program guidebook. She also published the “Guide to Promising Practices in Informal IT Education” in partnership with Girl Scouts and NCWIT in 2007, and advised on the WGBH Design Squad and All Terrain Brain resources.

Ruthe has served on the National Girls Collaborative Project Champions Board, the FIRST Robotics Girls FIRST Advisory Board, and is a founding board member of Springboard Innovation, a nonprofit dedicated to incubating grass roots social entrepreneurs. From 2001-2005, she was on the founding committee of the Oregon Robotics and Tournament Outreach Program (ORTOP), now the largest and most successful Lego Robotics program in the US and second largest in the world. Currently she works with the Boulder Area STEM Education Coalition, and is working to establish a Colorado implementation of the National Girls Collaborative Project. She sits on the Lewis & Clark College Board of Alumni, is an ambassador for the University of Oxford Said Business School, and is also a founding board member of HerStory Media, a nonprofit media production company that tells the stories of technical women. Ruthe earned an MBA in Social Entrepreneurship & Marketing from the University of Oxford’s Said Business School and is passionate about integrating innovative entrepreneurial strategies into her work.