

Deborah Estrin, PhD

Biography:

Deborah Estrin is currently a Professor of Computer Science at the new Cornell Tech campus in New York City, <http://tech.cornell.edu>. She is on leave from her position as a Professor of Computer Science with a joint appointment in Electrical Engineering at UCLA, where she held the Jon Postel Chair in Computer Networks, and was Founding Director of the NSF-funded Center for Embedded Networked Sensing (CENS, 2001-2012). Estrin received her Ph.D. (1985) in Computer Science from the Massachusetts Institute of Technology, and her B.S. (1980) from U.C. Berkeley.

Estrin's early research (conducted while on the Computer Science Department faculty at USC and the USC Information Sciences Institute) focused on the design of network and routing protocols for very large, global, networks, including: multicast routing protocols, self-configuring protocol mechanisms for scalability and robustness, and tools and methods for designing and studying large scale networks. In the late 90's Professor Estrin began her work in embedded networked sensing systems, with emphasis on environmental monitoring applications. Most recently her work focuses on participatory sensing systems, leveraging the location, activity, image, and user-contributed data streams increasingly available from mobile phones. Ongoing projects include Participatory Sensing for civic engagement and STEM education (<http://mobilizingcs.org>), and self-monitoring applications in support of health and wellness (<http://openmhealth.org>).

Estrin has been a co-PI on many NSF and DARPA funded projects and has been an active participant in numerous government sponsored studies. She chaired a 1997-98 ISAT study on sensor networks, and the 2001 NRC study on Networked Embedded Computing which produced the report Embedded Everywhere. She later chaired the Sensors and Sensor Networks subcommittee of the NEON Network Design Committee (neoninc.org). Estrin also served on the Advisory Committees for the NSF Computer and Information Science and Engineering (CISE) and Environmental Research and Education (ERE) Directorates, and is currently a member of the Computer Science and Telecommunications Board (CSTB) of The National Research Council (NRC). Estrin has also served as an editor for the ACM/IEEE Transactions on Networks, and as a program committee member for many networking related conferences, including Sigcomm and Infocom. She was Steering Group Chair and General Co-Chair for the first ACM Conference on Embedded Networked Sensor Systems, Sensys 2003, and served as one of the first Associate Editors for the ACM Transactions on Sensor Networks. She recently co-founded a non-profit, <http://openmhealth.org> with Dr. Ida Sim (UCSF). Estrin is a member of The World Economic Forum Global Agenda Council on Robotics & Smart Devices, 2012-14, and the Intel Science and Technology Center on Pervasive Computing, <http://istc-pc.washington.edu>.

Estrin is a fellow of the ACM, AAAS and the IEEE. She was selected as the first ACM-W Athena Lecturer in 2006, was awarded the Anita Borg Institute's Women of Vision Award for Innovation in 2007, inducted into the WITI hall of fame in 2008, and awarded Doctor Honoris Causa from EPFL in 2008 and Uppsala University in 2011. Professor Estrin was elected to the American Academy of Arts and Sciences in 2007 and into the National Academy of Engineering in 2009.