Make IT Matter: The Opportunities and Responsibilities of Pervasive Computing Research

Gregory D. Abowd
School of Interactive Computing
Georgia Tech
Atlanta, USA

Abstract—Many technologists have been wooed by the vision of pervasive or ubiquitous computing. We must recall that much of the initial visions of this field urged a human-centric view of the challenges and opportunities. Much of the initial efforts in our field have addressed important technical challenges, but for the overall health and longevity of pervasive computing, we need to think beyond our own relatively small communities. In this talk, I will try to show how I think our field must turn outward and think beyond the formulation of problems that we alone understand. I will show some examples that use health, education and the home as case studies.

I. BIOGRAPHY

Gregory Abowd is the Distinguished Professor in the School of Interactive Computing at Georgia Tech. In his nearly 15-year career at Georgia Tech, he has focused on technology- and human-centered aspects of ubiquitous computing in everyday environments. Some of his more widely known efforts include the first examples of indoor tour guides (Cyberguide), classroom capture technology (Classroom 2000), context-aware programming toolkits (the Context Toolkit), and domestic efforts for ubicomp (the Aware Home). Over the past 6 years, he has focused on technologies to address challenges of the developmentally disabled and is currently the Executive Director of the Health Systems Institute, a joint Georgia Tech/Emory University initiative looking at the delivery of health care for acute and chronic care in traditional and non-traditional health spaces. In 2008, he was elected to the ACM SIGCHI Academy and received the 2007 ACM SIGCHI Social Impact Award.