Preface

Ten years ago, Mark Weiser's seminal article, "The Computer of the 21st Century," was published by Scientific American. In that widely cited article, Mark described some of the early results of the Ubiquitous Computing Project that he lead at Xerox PARC. This article and the initial work at PARC has inspired a large community of researchers to explore the vision of "ubicomp". The variety of research backgrounds represented by researchers in ubicomp is both a blessing and a curse. It is a blessing because good solutions to any of the significant problems in our world require a multitude of perspectives. That Mark's initial vision has inspired scientists with technical, design, and social expertise increases the likelihood that as a community we will be able to build a new future of interaction that goes beyond the desktop and positively impacts our everyday lives. The curse for the research community over the past decade has been that it has been hard to find the correct intellectual home for the dissemination of research results. It is the intent of the Ubicomp 2001 conference to begin the trajectory towards creating a premier research forum for work in ubiquitous computing.

The Ubicomp conference grew out of a series of symposia hosted in Europe on the theme of Handheld and Ubiquitous Computing (HUC '99 and HUC 2K). The change in name reflects the desire to be inclusive of all research activities related to ubicomp, from technology-centered work on sensing, embedded and distributed systems, wireless and ad hoc networking, and software engineering, to more human-centered research on applications design, development and evaluation and understanding of the social implications of pervasive technologies. Though there are forums for work in each of these separate areas, we hope to incorporate into this conference high quality research that pushes not only a single research perspective but also attempts to move us closer to the vision of Weiser, a world in which increased penetration of computational infrastructure serves to enhance our everyday interactions with the environment and other humans rather than invade and degrade that experience.

The 14 full papers in this volume were selected from 90 submissions to Ubicomp 2001. The 15 technical notes are also found in this volume: 10 were drawn from 70 technical note submissions, while 5 were adapted from full paper submissions. These papers cover a wide technical range, including work in novel input/output devices, location awareness, group applications, and software infrastructure. This breadth illustrates the complexity implicit in the field of ubiquitous computing.

The Ubicomp 2001 conference was organized in collaboration with Georgia Tech, in Atlanta, Georgia, where the event was held, and in cooperation with professional society sponsors ACM SIGCHI, SIGMOBILE, and SIGSOFT. It was supported by a number of commercial sponsors, including Accenture, FXPAL, Hewlett-Packard, Intel, IBM, Microsoft, and Phillips. We would like to thank these organizations for their interest in and support of the event.

We would also like to thank the numerous reviewers who offered invaluable comments on the many full papers submitted to this conference. Additionally, we would like to thank the reviewers for their quick evaluation of the technical notes; many more submissions were received than expected, representing a heavy load for these reviewers. Finally, thanks also go to Jonathan Simon (Microsoft Research), who provided his Conference Management Toolkit (http://cmt.research.microsoft.com), a web-based system for managing the complex distributed paper review process.

July 2001   Gregory Abowd
Barry Brumitt
Steven Shafer

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