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UbiComp 2002: Ubiquitous Computing

4th International Conference Göteborg, Sweden, September 29 - October 1, 2002 Proceedings



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Preface

Ubiquitous computing is coming of age. In the few short years of the lifetime of this conference, we have seen major changes in our emerging research community. When the conference started in 1999, as Handheld and Ubiquitous Computing, the field was still in its formative stage. In 2002, we see the Ubicomp conference (the name was shortened last year) emerging as an established player attracting research submissions of very high quality from all over the world. Virtually all major research centers and universities now have research programs broadly in the field of ubiquitous computing. Whether we choose to call it ubiquitous, pervasive, invisible, disappearing, embodied, or some other variant of computing, it is clear that Mark Weiser's original vision has only become more and more relevant since the term was coined over 10 years ago.

But, most important in our context, the interest in the field can be gauged from the rising number of full-paper submissions to the conference: from about 70 in both 1999 and 2000, to 90 in 2001, to this year's record-breaking 136! Counting technical notes, workshops, poster and video submissions, there were over 250 original works submitted to this year's conference. This is an impressive effort by the research community, and we are grateful to everyone who took time to submit their work – without this, the conference would simply not exist.

There are 15 full papers in this year's volume, which were selected from the 136 paper submissions. There are also 14 technical notes: 9 were drawn from the 59 technical note submissions, while 5 were adapted from full paper submissions. These papers continue to cover the wide range of topics that is the hallmark of the ubiquitous computing community: mobile and context-aware systems, user studies and design, perceptual interfaces and responsive environments, sharing and accessing information (including privacy aspects), location models and systems, and sensors and applications.

In addition to the papers and technical notes, this year's conference included several other elements. The keynote speech by science fiction author and journalist Wil McCarthy offered a vision of the "ultimate alchemy" promised by recent research in so-called programmable matter. Nine workshops were held during the conference covering a wide variety of topics, ranging from conceptual models and privacy concerns, to user evaluation and emotional interaction. New additions to the program this year included a doctoral consortium for graduate students and a video demonstrations session. Posters, receptions and a panel on ubiquitous computing in domestic environments rounded out the program. The intention was to give an illuminating, thought-provoking, and also entertaining overview of the many facets of this vital research field.

The Ubicomp 2002 conference was hosted by the Viktoria Institute and was held at the Draken Cinema and Conference Centre in Göteborg, Sweden from September 29 to October 1, 2002. Technical society sponsors included ACM SIGCHI, ACM SIGMOBILE and ACM SIGSOFT. Extensive industry and institutional sponsorship helped ensure a high-quality event. Full sponsors included: Intel Research, Nokia, HP Labs, Springer-Verlag, and the Swedish Foundation for Strategic Research. Contributing sponsors were: Business Region Göteborg, Microsoft Research, Philips, and the Ambience project. Through an arrangement with the European Union's Disappearing Computing Initiative, this year's Ubicomp conference was colocated with DC's annual "Jamboree", where the 16 projects that constitute the DC community exhibited the results of over one and a half years of research involving almost 200 people. The Göteborg IT University also collaborated by arranging a special event. We were impressed by the level of commitment offered even in these financially difficult times for the industry, and would like to thank all organizations for their interest in and support for this conference.

We would also like to thank the numerous reviewers who offered invaluable comments on the paper and technical note submissions. The program committee (and those that helped them) were even more heavily loaded this year as the number of submissions increased significantly from last year. Yet, the committee worked diligently, with all submissions receiving four independent reviews. Most impressively demonstrating their dedication, almost all the program committee members attended our meeting distributed between Seattle, Washington and Göteborg, Sweden and helped make numerous difficult decisions. Finally, we must extend a special thanks to Scott Rose, the UW/CSE webmaster, who provided the finest possible development and support of our web-based submission management system, and to the local administrators who supported us at the Viktoria Institute.

July 2002

Gaetano Borriello Lars Erik Holmquist

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* Indicates a technical note.