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Ambient Intelligence

Second International Joint Conference, AmI 2011
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Proceedings

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Preface

This volume contains the papers and posters selected for presentation at the International Joint Conference on Ambient Intelligence (AmI-11) held in Amsterdam in November 2011. Ambient intelligence (AmI) represents a vision of the future in which products and services will be responsive to the user context, offering a rich variety of applications in the professional and consumer domains. AmI combines concepts of ubiquitous technology, intelligent systems and advanced user interface design putting humans in the center of technological developments.

Starting as the European Symposium on Ambient Intelligence in 2003 the conference has grown to an annual international event that brings together researchers and serves as a forum to discuss the latest trends and solutions.

Following the publication of early scenarios on ambient intelligence in 2001 by the European Commission's Joint Research Centre, the theme of AmI-11 focused on the "The Road Ahead, Shaping the Next 10 Years."

For this we had two keynote speakers focusing on this theme. On the first day a presentation was given by Margaret Morris, of Intel Research, who in her presentation "Left to Our Own Devices" described the role of mobile phones as gateway to ubiquitous computing. The closing keynote was given by Albrecht Schmidt, who presented "Beyond Ubicomp—Computing Is Changing the Way We Live."

The conference represented many "firsts" for the AmI community; for the first time the conference was held in Amsterdam, a rich and culturally diverse city that maintains the charms of an old city while being a modern thriving world city. For the first time a special track was held in the area of ambient-assisted living, reflecting the number of scientific investigations focusing on increasing the viability of seniors living longer while maintaining quality of life, independently at home. As a new element of the AmI program, a doctoral consortium track combined with an expert panel enabled PhDs to share findings and approaches to research.

After a solid review process, 50 papers and 8 workshops were accepted. To ensure the quality of work presented, 63% of regular and late-breaking paper submissions were rejected. Three independent reviewers were matched by expertise area to the topic of each paper. The Chairs handled borderline cases, and requested additional reviews when needed. A special thanks goes to the dedicated work of the 80 Program Members involved in the review panel who came from Asia, Europe, South America and North America, reflecting the spirit of AmI participation. Their names are published in the conference program.

Based on previous years, there appeared to be a growing trend of field studies, which suggests recognition of the need to validate new technologies, evaluations and design approaches to ambient systems. The range of papers dealing with

novel interaction techniques and smart environments and sensing demonstrate the gains to be achieved in real-world settings. A number of late-breaking papers examine the power of ambient systems in terms of affecting human behavior, raising issues related to trust and privacy, which were topics touched upon in the conference, but deserve further attention in future research on ambient intelligence.

Apart from the main conference we had a record number of workshops organized on the day before the conference. We also had a doctoral colloquium in which PhD students met and discussed their work with each other and a panel of experienced AmI researchers and practitioners. The workshop and the doctoral colloquium papers are published in the proceedings in the Springer's *Communications in Computer and Information Science* series.

AmI-11 was made possible by contributions from Philips Research, IIP Create, Noldus Information Technology, the City of Amsterdam, Ministry of Economic Affairs through AgentschapNL, the University of Amsterdam and Hogeschool van Amsterdam.

In closing we would like to thank the conference Organizing Committee for their dedicated support and all of the paper presenters and conference participants who contributed to the vibrant discussions, panels, and workshops held at AmI 2011.

November 2011

David Keyson
Ben Kröse

Organization

The 5th European Conference on Ambient Intelligence, AmI 11, was held in Amsterdam, The Netherlands.

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