

Preface

The 7th International Conference on Ubiquitous Computing (UbiComp 2005) marked the first time that this premier venue for original research contributions in ubiquitous computing was held in Asia. The Tokyo, Japan venue reflects the desire of the UbiComp community to make this conference series an international event that showcases the increasing amount of high-quality ubiquitous computing research that is taking place worldwide. As the field of ubiquitous computing has matured, the UbiComp Conference has gained significance worldwide, not only among researchers, but also with industry and general society.

This interest in the potential of ubiquitous computing to impact our lives has resulted in the creation of many new research programs in academia and industry. These efforts have, in turn, led to mass media coverage of efforts and, in some regions of the world, large-scale government-initiated collaborative efforts to explore the potential of these emerging technologies. These trends are reflected in the rise in the number of submissions to UbiComp 2005. This year the conference received 230 full papers, submitted almost equally from Asia (~100 submissions), North America and South America (~60 submissions) and Europe (~60 submissions), with the remainder being received from Australia and Africa. From among many high-quality submissions, the technical program committee accepted 22 papers. These papers were chosen based solely on the quality of their peer reviews using a double-blind review process.

The papers submitted to UbiComp 2005 showcase the diverse nature of ubiquitous computing research. Submissions covered topics such as human-computer interface (HCI), systems, context recognition and use, communications, and social implications and applications of computing. Methodologies included real-world deployments, laboratory experiments, ethnographic analysis, qualitative and quantitative evaluation, and theoretical explorations. The majority of the submissions covered more than one topic area and clearly filled a gap between more established research fields. Topics such as location systems and their applications, case studies and user interfaces, algorithms for recognition of context, and novel devices received the most attention by authors this year.

The Program Committee (PC) and reviewer pool was selected to provide the multi-disciplinary expertise required to evaluate original contributions in these research areas. We were fortunate to have an outstanding group of international researchers volunteering their time and expertise. The high quality of this conference was the result of their hard work and dedication to the advancement of the field. Due to the high number of submissions and the peer-review-process, PC members had to review an exceptionally large number of papers. Each PC member was responsible not only for reviews but also for monitoring the review process and facilitating discussion among external reviewers. External reviewers also had an unusually high review load with an average of six full papers. The comments of these experts provided feedback for the submission authors

and helped the Program Committee in their final selection decisions. We thank both the PC members and the external reviewers for delivering excellent and constructive reviews.

We would also like to extend our gratitude to the General Chair of the conference, Hideyuki Tokuda, who made this event possible and who helped with organizing the Program Committee meeting. Other members of our community also made outstanding contributions. Among them, Christian Decker supervised the pre-printing process of these proceedings, Albrecht Schmidt helped with the logistics of the Program Committee meeting (while simultaneously running Pervasive 2004), and Matthias Kranz and Rainer Fink provided valuable technical support during the meeting.

Our final word of thanks goes to all the 663 authors who submitted full papers to this conference. Presenting research work in a paper requires a great deal of effort. We hope that these authors were rewarded with insightful reviews and an enjoyable conference program.

July 2005

Michael Beigl, Stephen Intille, Jun Rekimoto

UbiComp 2005 Paper Review Process

The review process for UbiComp 2005 was very similar to the process used for UbiComp 2004 and was divided into 6 phases.

Phase 1: Program Committee (PC) Assignment and Reviewer Nomination

All papers submitted were assigned to a lead Program Committee member (PC) and a secondary PC reviewer, both selected from the Program Committee (PC). Care was taken that both PC members assigned did not have any conflict of interest with the paper and that the PC members had the appropriate expertise to review the paper. These two PC members in turn nominated two additional reviewers from a reviewer pool suggested by members of the PC and vetted by the PC chairs. PC and external reviewer paper loads were balanced by the PC chairs.

Phase 2: Quick Reject

To allow us to concentrate review efforts on papers with the best chances of being accepted, an additional quick reject phase was added before the review process. Papers where both PC members concurred that the paper was either wildly “out of scope” or “of unacceptably low quality to be accepted” were nominated for “quick reject” after a short discussion phase. In cases where at least two PC chairs also agreed, the papers were returned to the authors with just two reviews.

Phase 3: Reviews

PC chairs then processed all the papers that were not quick-rejected and allocated external reviewers based on the selections suggested by the PC members in Phase 1. A large effort was made to balance reviewing load across external reviewers. Because many papers crossed several research fields, care was taken to assign an expert for every area addressed in the paper. Reviewers were also carefully chosen to preserve anonymity and avoid institutional conflicts of interest. When necessary, reviewers could ask for additional reviews to be carried out. Papers received an average of five reviews in total – two from PC members and 3 from external reviewers.

Phase 4: On-line Discussion

After all of the reviews were received, the lead PC member for each paper coordinated an electronic discussion among the reviewers to reach a consensus as to the technical merit of the paper. When necessary, the reviewers could ask for additional reviews to be carried out to clarify certain aspects of the paper.

Phase 5: PC Meeting

A single PC meeting was held on May 8 in Munich, Germany. Attendance was a condition of acceptance to serve on the PC, and almost all of the PC members attended the meeting. At the meeting the committee examined all the papers that scored above a threshold (roughly corresponding to borderline weak reject) as well as some other papers with unusually high score spans. Each paper was discussed and rated. The final program was selected solely based on the criteria of scientific excellence.

Phase 6: Shepherding

To help authors with accepted papers interpret their reviews, all of the papers were allocated shepherds selected from the PC. These PC members guided the authors through the final revisions of their papers. Acceptance of papers was conditional on approval from the shepherds. This process helped considerably to improve the clarity of written presentation of work in a number of cases, and it ensured that the papers in these proceedings were revised to reflect the extensive feedback provided to the authors by the PC.

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