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Pervasive Computing

5th International Conference, PERVASIVE 2007
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Preface

On behalf of the Organizing Committee for Pervasive 2007, welcome to the proceedings of the Fifth International Conference on Pervasive Computing. The year 2007 was a milestone for this young conference series, as it marked the first year that it was held outside of Europe. This “globalization” of the Pervasive conference is further evidence of its emergence as one of the most respected venues for publishing research on pervasive and ubiquitous computing. Each Pervasive conference represents a snapshot of our field, capturing the state of the art in technology, the research challenges we are addressing, as well as the people that form the Pervasive community. Each year’s proceedings represent an opportunity to learn about new areas and identify upcoming research opportunities, and 2007 was no exception.

Pervasive 2007 attracted 132 high-quality submissions, from which the Technical Program Committee accepted 21 papers, resulting in a competitive 16% acceptance rate. In total, there were over 400 individual authors from 32 countries, coming from a wide array of disciplines and from both academic and industrial organizations. Papers were selected solely on the quality of their peer reviews using a double-blind review process. We were fortunate to draw on the combined experience of over 125 years of research in pervasive and ubiquitous computing in our 28 Program Committee members, coming from the most prestigious universities and research labs in Europe, North America, and Asia. Program Committee members were aided by no less than 177 external reviewers in this rigorous process, in which each Committee member wrote about ten reviews and each external reviewer between one and six. The total of 541 entered reviews resulted in an average of 4.2 reviews per paper, or almost 2,000 words of feedback (some 5 pages). To ensure that we had quality reviews as well as substantive deliberation on each paper, a final discussion phase generated 833 discussion items before the start of the Committee meeting. As a result, some 60 submissions were selected for discussion at the two-day, 14-hour Program Committee meeting, where a strict schedule and many additional reading assignments ensured that each candidate paper had been thoroughly evaluated by at least three Committee members present.

Pervasive has traditionally been a practitioner’s conference, and the 2007 program certainly shows that tradition. With pervasive and ubiquitous computing gradually coming of age, research papers had to demonstrate not only novelty, but also applicability and feasibility. A major theme throughout the technical paper presentations was thus the rigorous evaluation and re-evaluation of novel and (seemingly) well-known principles in both home and work domains. Location continued to play a major role in the community, although refinement of existing principles and its implications for applications and services received increasing attention. Security and privacy issues, long since on the Pervasive agenda, were

considered more and more with an eye towards usability and practicality, especially in the context of location-aware applications, where the increased availability of real-world data begins to allow realistic analyses. Last but not least, the prevalence of mobile phones and their use as an interface to a variety of applications and services emerged as an established new community research focus.

The research papers, although at the core of the Pervasive conference series, are hardly its only highlight. In addition to the technical sessions, Pervasive 2007 featured a keynote speech by Adam Greenfield—an internationally recognized writer and user experience consultant. As with all of its predecessors, the 2007 conference also contained a poster and demo reception, as well as a full day of workshops and doctoral colloquium. As a first for Pervasive, the final day of the conference was dedicated to tutorials by research community leaders. This series of short tutorials focused on the fundamentals of pervasive computing and were intended as an introduction for new researchers and practitioners in the field.

Several organizations provided financial and logistical assistance in putting Pervasive 2007 together, and we would like to acknowledge their support. We thank the University of Toronto for hosting the conference and managing the local logistics. We would also like to thank the staff and students at the Georgia Tech College of Computing for hosting the Program Committee meeting and ensuring an ample supply of food, coffee, and post-its throughout the two days. We very much appreciate the support of our Gold Sponsors Google, Intel and Nokia, Bronze Sponsor SMART Technologies Inc., along with the generous donations from FXPAL, MERL, and Microsoft Research—all of this was essential to helping us provide an excellent conference experience for all attendees. Lastly, we would like to thank, most of all, the authors who submitted their work to Pervasive, and the Program Committee members and our external reviewers who spent many hours reviewing submissions, shepherding papers, and providing the feedback needed to create this final program.

May 2007

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