Preface

MobileHCI is a forum for academics and practitioners to discuss the challenges and potential solutions for effective human-computer interaction with mobile systems and services. It covers the design, evaluation and application of techniques and approaches for all mobile computing devices and services. MobileHCI 2004 was the sixth in the series of conferences that was started at Glasgow University in 1998 by Chris Johnson. We previously chaired the conference in 1999 in Edinburgh (as part of INTERACT 1999) and in 2001 in Lille (as part of IHM-HCI 2001). The last two years saw the conference move to Italy, first under the chairmanship of Fabio Paternò in Pisa then under Luca Chittaro in Udine. In 2005 the conference will move to Austria to be chaired by Manfred Tscheligi. Each year the conference has its own website hosted by the conference chair, however the address www.mobilehci.org will always point to the next (or current) conference.

The number of submissions has increased every year. This year we received 79 full papers (63 were received last year) from which we accepted the best 25. We had 81 short papers and posters submitted (59 last year) and accepted 20 of these as short papers and 22 as posters. We received 9 workshop, 4 tutorial and 2 panel proposals, from which 5, 2 and 2, respectively, were accepted.

All papers were reviewed by two reviewers, and any papers where the reviewers' ratings were widely different were reviewed a third time. This allowed us to keep the quality of the work presented very high. We would like to thank all of the reviewers for their help and time. It was great to see so many people put so much of their time into the conference. The quality of the reviews helps the field as a whole get better and better.

Traditionally there has been a split at MobileHCI, with much of the academic research presented being carried out on palmtop devices while industrial interest has always been stronger from mobile telephone companies. While this is still true for MobileHCI 2004, the state-of-practice is showing strong convergence with many phones now being powerful handheld computers too. The presentations at MobileHCI 2004 covered a broad range of research into the usability of mobile devices in the widest sense, reflecting the very different nature of interaction on mobile devices compared to traditional desktop interfaces. This year we identified four main themes within the papers: overcoming device limitations; evaluating mobile systems; supporting diverse user groups; and the mobile Web.

The first theme looks at two fundamental problems with small devices: input and output. Interaction techniques are restricted because we want a small device that fits comfortably into a pocket; furthermore power is a serious problem with battery technology often lagging behind the power needs of researchers and limiting or influencing how devices work in practice. Papers in these sessions looked at novel interface designs to handle these problems with small devices, including increased use of sound, use of tilt and gesture, detailed investigations

of very small display areas for meaningful interaction and the design of interfaces to better support users of power-limited devices.

Our second theme moves into another key area of difference between traditional office/desktop-based HCI and mobile HCI: evaluation. Trials of users sitting at a desk doing a fixed set of tasks without interruption just do not feel appropriate for assessing interfaces that will be used while users are walking around, at home or otherwise enjoying themselves. The papers in these sessions looked at whether this intuition about mobile evaluation is correct and at evaluations conducted in different settings.

Access to the World-Wide Web has become a core part of many people's lives at home and in the office. Providing access on small devices is very challenging as the pages are almost universally designed for large desktop screens. A number of papers discuss different approaches to providing Internet access on mobiles, including transforming the pages visually, personalization of pages and making more use of different modes of interaction.

Office workers, the core of much of traditional HCI, are a fairly homogeneous group of people, but mobile devices are being used by a much wider population. A small group of papers at MobileHCI 2004 looked at different user groups, particularly older and younger users. There are many potential users in these categories but little research has been done on their needs, wants and capabilities.

The proceedings are split into ten sections, the first seven covering the full papers with the remainder covering the other submission categories of short papers, posters, tutorials and workshops, and panels.

Finally, we extend our gratitude to the many people who worked to make MobileHCI 2004 happen and to our sponsors for their generous support of the conference. Thanks also go to the student volunteers who did a great job making things run smoothly.

September 2004

Stephen Brewster and Mark Dunlop
Chairs
MobileHCI 2004
www.mobilehci.org

Organization

MobileHCI 2004 was organized by the Department of Computer and Information Sciences, University of Strathclyde, UK and the Department of Computing Science, University of Glasgow, UK.

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