Preface

The 8th ERCIM Workshop "User Interfaces for All" was held in Vienna, Austria, on 28–29 June 2004, building upon the results of the seven previous workshops held in Heraklion, Crete, Greece, 30–31 October 1995; Prague, Czech Republic, 7–8 November 1996; Obernai, France, 3–4 November 1997; Stockholm, Sweden, 19–21 October 1998; Dagstuhl, Germany, 28 November – 1 December 1999; Florence, Italy, 25–26 October 2000; and Paris (Chantilly), France, 24–25 October 2002.

The concept of "User Interfaces for All" targets a proactive realization of the "design for all" principle in the field of human-computer interaction (HCI), and involves the development of user interfaces to interactive applications and e-services, which provide universal access and usability to potentially all users. In the tradition of its predecessors, the 8th ERCIM Workshop "User Interfaces for All" aimed to consolidate recent work and to stimulate further discussion on the state of the art in "User Interfaces for All" and its increasing range of applications in the upcoming Information Society.

The emphasis of the 2004 event was on "User-Centered Interaction Paradigms for Universal Access in the Information Society." The requirement for user-centered universal access stems from the growing impact of the fusion of the emerging technologies and from the different dimensions of diversity that are intrinsic to the Information Society. These dimensions become evident when considering the broad range of user characteristics, the changing nature of human activities, the variety of contexts of use, the increasing availability and diversification of information, knowledge sources and e-services, the proliferation of technological platforms, etc. The 8th ERCIM Workshop "User Interfaces for All" focused on the new HCI challenges arising from this evolution, and on how these affect the continuing efforts towards universal access in the Information Society.

Efforts towards universal access to Information Society technologies have met wide appreciation by an increasing proportion of the international research community, leading to various European and international research and policy initiatives, and to the establishment of forums for the diffusion and exchange of ideas and research results. These initiatives contribute to appropriating the benefits of the increasing international momentum and interest in the topics of universal design and universal access. Among them, the ERCIM working group on "User Interfaces for All" plays a catalytic role in bringing closer researchers and teams working in the different ERCIM organizations (but also organizations beyond ERCIM or the European boundaries), and sharing common interests and aspirations to contribute towards making the emerging Information Society equally accessible to all.

The 8th ERCIM Workshop "User Interfaces for All" attracted the strongest ever interest worldwide, with over 140 submissions from all over the world, covering a wide range of topics that include novel interaction paradigms and contexts of use, innovative concepts of universal accessibility and sociability, new modalities and dialogue styles, user-centered design in mobile application scenarios, late-breaking empirical results with respect to assessing universally accessible applications, and standardiza-

tion efforts. Contributions addressed not only technological solutions, but also design paradigms and empirical methods for evaluation, as well as policy developments. Reflecting this essential variety of topics, the workshop featured the two keynote speeches "Interface Design Strategies to Promote Learnability for All" by Prof. Ben Shneiderman (University of Maryland, USA) and "Online Communities for All" by Prof. Jenny Preece (University of Maryland Baltimore County, USA).

This volume is organized into five thematic sections:

I Implementing user diversity. Contributions in this section investigate several important issues related to the varying characteristics and requirements of users of Information Society technologies, including cognitive assessment and personality profiling, individual differences and behavioral aspects of Web navigation, automated assessment of clinical populations, information needs of older users, and user requirements related to various types of cognitive impairments.

II Adaptation and personalization. Contributions in this section discuss issues related to user interface and content adaptation for universal access. Addressed topics include adaptive user modeling, interaction monitoring and usage patterns extraction, personalization based on cognitive styles, user interface adaptation for mobile computing devices, and interrelationships between adaptation and accessibility.

III Accessibility and usability of interactive applications and e-services. Papers in this section present methods, design guidelines and tools for accessibility and usability in the context of Web-based applications and services, and in particular in application domains such as education, health, and access to information.

IV Universal access and design for all: guidelines, standards and practice. This section includes papers discussing issues of design inclusiveness, focusing on concrete practice, and standards elaboration and impact.

Novel interaction techniques, devices and metaphors. This section proposes a variety of novel approaches to user interaction, discussing topics such as extended functionality devices, force feedback devices, input rate enhancement techniques, visualization techniques in augmented reality, nomadic speech entry, haptic and audio-based interaction, and multimodality.

We would like to thank all the contributors and participants who made this workshop one of the most successful international events held so far regarding user-centered universal access. The atmosphere was characterized by in-depth and provoking presentations as well as fruitful cross-disciplinary discourse in a socially rewarding environment. We also wish to thank the members of the Programme Committee and all the reviewers for their dedicated efforts to maintain the high scientific quality of the event, as well as the invited speakers Prof. Ben Shneiderman and Prof. Jenny Preece.

June 2004   Christian Stary and Constantine Stephanidis

Springer