EDITORIAL PREFACE

Themed Issue on Mobile HCI @ iHCI

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Welcome to the latest issue of the *International Journal of Mobile Human Computer Interaction* (IJMHCI). As we enter our sixth year of print, this issue showcases the best of mobile HCI research as presented at the 2013 iHCI conference and so I am delighted to be able to present this issue of the IJMHCI not only as a celebration of interesting, high quality research in the field of mobile HCI, but also as a means to raise awareness of an emerging HCI conference – the Irish HCI (iHCI) conference – which, like the IJMHCI, is emerging from its infancy.

INTRODUCTION TO iHCI

The seventh annual Irish Human Computer Interaction (iHCI) Conference took place at Dundalk Institute of Technology, on June 12th and 13th 2013. Organised by CASALA (The Centre for Affective Solutions for Ambient Living Awareness), the conference featured presentations from numerous universities and industries around Ireland, as well as international speakers from the UK and Sweden. Since its inaugural event in 2007, iHCI has been first and foremost the venue for the Irish HCI community to meet and discuss their work "at home" and to create national awareness and visibility for a growing field of research in Irish academia and industry. With its 7th edition it is clear that iHCI has developed into an established publication forum, showcasing high quality papers submitted by both national and international authors. In 2013, accepted papers covered traditional HCI topics such as design, mobile HCI and data representation in addition to topics such as personal informatics, HCI in healthcare and accessible design. The rich, full conference programme included an industry session, a poster session and a demo session, along with presentations of the accepted papers. For the first time at iHCI, we also had a number of invited talks from leading Irish HCI academics. Highlights of the conference included two keynote presentations, the first from Brian Reaves, group vice president and global lead at SAP's Technology and Innovation platform, based in Palo Alto, California. Our second keynote was by Dónal Rice from the Centre of Excellence in Universal Design. [iHCI Introduction provided by Dr Julie Doyle, iHCI Programme & Conference Chair,

CASALA, Dundalk Institute of Technology, Co. Louth, Ireland]

INTRODUCTION TO SELECTED IHCI ARTICLES

Considering as part of its remit a responsibility to bring greater awareness to interesting research being published in venues such as iHCI, the IJMHCI is delighted to introduce four varied and interesting articles in this issue. These articles were selected by the iHCI'13 conference programme chairs as the best of the peer-reviewed articles in the field of mobile HCI from the 2013 conference, and the authors were then invited to extend their papers for inclusion in this themed issue of the IJMHCI.

The first article – "*Mobile HCI: Issues Surrounding Cognition, Distraction, Usability and Performance*" by Robin Deegan – focusses on the cognitive costs associated with ever-increasing advances in mobile technology. As Deegan notes, "increasingly complex software, installed on increasingly complex mobile devices, being used in increasingly complex environments is presenting Mobile HCI with serious challenges" and it is this challenge to which Deegan responds in his article. Reporting on a series of experiments designed to investigate the relationship between cognition, distraction, usability and performance, Deegan observes that some distractions have the potential to impact usability yet not performance, and vice versa. On the basis of his results, Deegan argues for the need for and development of a cognitive load aware system.

In "*Life-long Collections: Motivations and the Implications for Lifelogging with Mobile Devices*" by Caprani *et al.* we are introduced to the practice of lifelogging. The authors present the results of an investigation into the motivations for people to use life-long collections, and reflect on how such motivations can and, importantly, should influence the design of future lifelog systems across all ages of users.

In the third article, entitled "*Examining Mobile Tasks and Devices – Developing an User Centric Guideline*", Carey, Helfert and FitzPatrick respond to the need to best identify which specific mobile device is best suited to the deployment of a given application. They argue that low adoption rates and poor performance outcomes are likely if an application is deployed on an inappropriate mobile device. The authors present a guideline to assist in the identification of the most suitable device for a given application in order to return successful task performance from the user's perspective, arguing that such careful device selection will help avoid low application adoption rates and poor usability. They demonstrate use of the guideline as applied to a usability study.

The final article – "*Older Adults with AMD as Co-Designers of an Assistive Mobile Application*" – is by Hakobyan, Lumsden and O'Sullivan. It focusses on adoption and adaptation of participatory design methods for inclusive design of a mobile assistive software application for older adults with age-related macular degeneration. In their article, the authors reflect on their experience of engaging in such design activities with representatives of their special needs user group (including the methodological adaptations and concessions necessary to accommodate participants' needs) as well as reflecting on the participants' views on being part of the process, and they discuss emergent design themes identified as a consequence of their design activities.

All that remains now is for me to welcome you again to this themed issue in which the authors of interesting articles have certainly challenged us to consider complex aspects of mobile HCI. Enjoy!

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Joanna Lumsden (PhD) is a senior lecturer/researcher in the School of Engineering & Applied Sciences at Aston University (Birmingham, UK) where she also manages the Aston Interactive Media (AIM) Lab. Prior to moving to Aston University in 2009, Joanna was a researcher with the National Research Council of Canada (NRC) and the designer and lab manager for a state-of-the-art mobile human computer interaction (HCI) evaluation lab within the NRC facility. Joanna is also an adjunct professor with the Faculty of Interdisciplinary Studies at the University of New Brunswick (Canada). She obtained her BSc in software engineering (Hons) from the University of Glasgow (Scotland, 1996), where she also later achieved her PhD in HCI in 2001. Her research interests and expertise are mainly in mobile HCI and associated evaluation tech-niques. She has served on program committees for several international HCI/general computer science conferences and was also editor of the Handbook of Research on User Interface Design and Evaluation for Mobile Technology.