EDITORIAL PREFACE

Jo Lumsden, School of Engineering & Applied Sciences, Aston University, Birmingham, UK

Welcome to the latest issue of the *International Journal of Mobile Human Computer Interaction* (IJMHCI). This issue once again presents a collection of interesting and thought-provoking articles. In the first paper – *Design Games for In-Situ Design* – Erik Kristiansen tackles, head-on, the design challenges associated with the emergence of context-based products. In particular, Erik proposes the benefit of engaging in *in-situ design* practices early in the design process in order to allow context to fully influence the design of a location-based or tag-based application. Specifically, Erik presents a creative, in-situ design approach called *sitestorming* for pervasive game design. The paper discusses a series of evaluations of the method which illustrate the potential impact of the method as well as its acceptance by designers.

The second article is by Hamed Ketabdar, Amin Haji-Abolhassani and Mehran Roshandel and is entitled *MagiThings: Gestural Interaction with Mobile Devices Based on Using Embedded Compass (Magnetic Field) Sensor*. In this, the authors extol the virtues of around device interaction (ADI), proposing a new approach for such interaction (called *MagiThings*) which utilizes the digital compass (magnetometer) embedded in most new smartphone technology. Users of *MagiThings* hold or wear a magnet which they use to gesture input in the space around the phone; these gestures deform the magnetic field around the phone, with each unique deformation being interpreted as an independent input against pre-defined templates. This paper introduces *MagiThings* and presents the results of evaluations which show high recognition accuracy rates across a range of applications.

In *Escape-Keyboard: A Sight-Free One-Handed Text Entry Method for Mobile Touch-Screen Devices*, Nikola Banovic, Koji Yatani, and Khai N. Truong visit the interesting topic of eyes-free data input on mobile devices. They present *Escape-Keyboard* – an eyes-free text entry method for mobile touch-screen devices – which supports one-handed typing whereby users press their thumb on zones of the screen and input letters by performing a flick gesture. The paper discusses the results of a comparative evaluation of *Escape-Keyboard* against *EdgeWrite* in which, although both methods were found to be comparably fast and accurate for eyes-free use, reduction in mental demand was identified as key to improving the learnability of *Escape-Keyboard* for eyes-free use.

The final paper is entitled *An Evaluation of Older Adults' Use of iPads in Eleven UK Care Homes* and is by Tim Jones, Daniel Kay, Penney Upton and Dominic Upton. In this, the authors recognize the unique opportunity presented by the iPad (and other similar devices) for older adults to engage more fully with

mobile technology. They argue that although the iPad breaks down some of the traditional dexterity-based barriers to technology use by older adults, it brings with it new barriers in the form of weight and screen reflection. In this paper, Jones *et al.* present the results of an exploratory evaluation of how older adults in UK care homes, together with their carers, use iPads to improve communication and to establish social networks, and investigate the most used applications within this community. Based on their findings, the authors suggest that the "portability and adaptive nature of the iPad combined with the increased social interaction afforded by [the] device could increase quality of life in care settings."

So, welcome again to this latest issue of the IJMHCI: I hope that you enjoy reading the exciting research included within!

Jo Lumsden
Editor-in-Chief
IJMHCI

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 techniques. 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.