

Editorial Preface

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Handheld computing is keeping flourishing. Hundreds of innovative apps are produced every day. For example, Pokemon Go, a mobile game, becomes a global phenomenon quickly in 2016. It is an app combining location-based services with augmented reality. Many more unforeseen or unthought-of apps will be created from time to time. It is hard to imagine what the apps can do years later. This issue consists of four articles covering the current topics of handheld computing including: (i) augmented reality, (ii) wearable computing, (iii) mobile computing, and (iv) mobile computing and social interaction. Brief introductions of the four articles are given next.

Article 1. Know your world better: Cloud based augmented reality Android application: Augmented reality (AR) is a view of a real world scene where components are augmented by computer-generated objects like images and audio clips. One example is complementing the Google Maps Street Views by markers like store names. This research is to design and develop an Android augmented-reality application, which helps mobile users to find friends and locate places in close proximity. It discusses a method of augmenting Point of Interests (POIs) on a mobile device. User has to move his phone pointing in a direction of his choice and POIs if any are shown in real time. The user's interest with respect to the environment is inferred from speech or by selecting from the choices; this data is used for information retrieval from the cloud. The result of context-sensitive information retrieval is augmented onto the view of the mobile and provides speech output.

Article 2. What if devices take command: Content innovation perspectives for smart wearables in the mobile ecosystem: Wearable computing is to use wearable computers such as smart-glasses to perform wireless, mobile operations such as reading the text messages, making phone calls, and checking the weather. This research examines the innovation potential of wearable devices on the whole mobile set of actors, starting from a two-scenarios premise: one of sustaining innovation, and a second scenario of more prominent influence. The research finds significant innovating potential for the smart kind of wearables, with a range of influence that can modify the course of all current mobile players. In addition, it shows the possibility that a strong development of these items can eventually give birth to a new kind of media, specifically conceived for the wearable experience.

Article 3. Health apps by design: A reference architecture for mobile engagement: Mobile health is the practice of medicine and public health supported by mobile handheld devices, e.g., delivery of healthcare information anytime and anywhere, and real-time monitoring patients' vital signs. The barriers preventing patients and care providers from using these apps include the following. For patients, information that contradicts health care provider advice, manual data entry procedures and poor fit with their treatment plan. For providers, distrust in unknown apps, lack of congruence with workflow, inability to integrate app data into their medical record system and challenges to analyze and visualize information effectively. This research builds upon previous work to define design requirements for quality m-health apps. In addition, it proposes a framework for patient engagement to create a new reference architecture for the next generation of healthcare mobile apps.

Article 4. The value of mobile communication for social belonging: Mobile apps and the impact on social interaction: Two themes are covered in this paper: (i) the relevance of mobile media in

shaping online activities and patterns of interaction and (ii) its relation with industrial stakeholders and individual users' perspectives on the technology. The concepts of mediation and mediatization, as well as the processes of belonging and social cohesion are discussed. Data from mobile internet adoption and use will be studied too. In addition, two complementary views, mobile internet stakeholders' and users', are given. They encourage a discussion on the interdependencies between individual adoption patterns and market derived determinants. Results will provide contributions for the understanding of this type of technology adoption processes and the increasing importance of mobility in cultural and social practices.

The Editor-in-Chief thanks the authors' contributions and appreciates readers' support. Hope you will enjoy reading this issue.

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Wen-Chen Hu received a BE, an ME, an MS, and a PhD, all in Computer Science, from Tamkang University, Taiwan, the National Central University, Taiwan, the University of Iowa, Iowa City, and the University of Florida, Gainesville, in 1984, 1986, 1993, and 1998, respectively. He is currently an associate professor in the Department of Computer Science of the University of North Dakota, Grand Forks. He was an assistant professor in the Department of Computer Science and Software Engineering at the Auburn University, Alabama, for years. He is the Editor-in-Chief of the International Journal of Handheld Computing Research (IJHCR), the general chairs of a number of international conferences such as the 2016 International Conference on Big Data, IoT, and Cloud Computing (BIC 2016), and associate editors of several journals like Journal of Information Technology Research (JITR). In addition, he has acted more than 100 positions as editors and editorial advisory/review board members of international journals/books, and track/session chairs and program committee members of international conferences. He has also won a couple of awards of best papers, best reviewers, and community services. Hu has been teaching for about 20 years at the US universities and over 10 different computer/IT-related courses, and advising/consulting more than 100 graduate students. He has published over 100 articles in refereed journals, conference proceedings, books, and encyclopedias, edited more than 10 books and conference proceedings, and solely authored a book entitled "Internet-enabled handheld devices, computing, and programming: mobile commerce and personal data applications." His current research interests include handheld/mobile/smartphone/spatial/tablet computing, location-based services, web-enabled information system such as search engines and web mining, electronic and mobile commerce systems, and web technologies.