GUEST EDITORIAL PREFACE

Special Issue on Mobility and Human Interaction

Shu-Lu Hsu, National Chiayi University, Chiayi City, Taiwan

Hong-Yi Chang, National Chiayi University, Chiayi City, Taiwan

The mobile revolution is underway. Smartphone and tablet adoption has proliferated at an unprecedented rate. The concept of this special issue is dealing with the relationship between mobility and human interaction, the new challenges, impacts, deployment and strategies on next generation mobile applications, mobile devices and networks. We aim to promote the understanding of mobile service users, and focus on the key areas in mobilized interactions. This special issue explores the opportunities and considerations of implementing mobile applications and technologies and provides knowledge on how agencies can implement innovation and provide services more securely, efficiently, and at a lower cost. Totally 5 papers will be recruited in this special issue. We hope the collection of ideas on mobile technology will not only improve peoples' interactions, in doing so, change the world.

First of all, Dr. Cacho-Elizondo and his colleagues investigated the intention of adoption a mobile coaching service to help people to stop smoking in France. The service takes the form of short text messages (SMS or MMS) sent to cell phones to help individuals in a range of situations or anti-smoking activities. The empirical results show that peer influence and the enjoyment generated by this type of remote coaching service significantly affect the the intention to adopt the proposed mobile coaching service.

At the second article, Dr. Yartey and his colleagues, based on motivation and network externalities theories, examined the use of smart phones for self-broadcasting among college students. The social implications of using smartphones as a broadcast and self-promotion medium were discussed.

At the third article, Professor Lee and his colleagues developed a high capacity reversible and invisible data hiding technique using prediction error expansion to enhance the confidence in exchanges of personal and sensitive data for human interaction activities and mobility in wireless networks by hand-held mobile devices.

At the fourth article, Professor Wu and his colleagues developed a method to use the Kalman filter to implement the Auto bit-rate technique, which can regulate the bit-rate of

the video/audio data automatically when the bit-rate is insufficient, and simultaneously guarantee the video quality. The advancement of computers and information technology has promoted the rapid development of HMI and interactive systems. Based on human interaction, this paper focuses on the widespread video streaming. The experimental result proves that the proposed Auto bit-rate scheme can regulate the bit-rate to achieve the optimal visual quality and offer the best quality of service at the same time.

At the fiveth article, Dr. Xie and his colleagues explored the potential of three prediction models (i.e., Absolute Distribution Markov Chain, Probability Summation Markov Chain and Weighted Markov Chain based on Genetic Algorithm) in predicting the most possible N (Top-N) menu items based on the users' historical menu item clicks. The results show that Weighted Markov Chain based on Genetic Algorithm can obtain the highest prediction accuracy and significantly decrease navigation time as compared to the static counterpart.

We are extremely grateful to the authors who kindly contributed their papers for this issue and the referees for their timely and in-depth reviews of these papers.

Shu-Lu Hsu
Hong-Yi Chang
Guest Editors
IJTHI