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## Editorial

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**Biographical notes:** Jungsoo Han received his BS, MS and PhD in Computer Engineering from Kyung Hee University, Republic of Korea. Since 2001, he has been a Professor in the Division of Information and Communication, Baekseok University, Cheonan City, Chungnam, Republic of Korea. In 2014, he researched convergence IT and creative education methodology at California State University Fullerton as an Exchange Professor. His research

topics include data mining, telemedicine, intelligent systems and HCI. He serves as the Executive Editing Director of the International Conference on Convergence Content (ICCC), General co-Chair of the International Conference on Digital Policy and Management (ICPDM), General co-Chair for steering committees of the International Conference on Convergence Technology (ICCT).

SangYeob Oh is currently a Professor in the Division of Computer Media, Gachon University, Korea. His research interests include speech recognition, vehicle safety communications, and HCI. He has edited 27 computer science books. He serves as the Executive Editing Director for the International Conference on Digital Policy Management, and Executive Editing Director on the Steering Committees for the International Conference on Convergence Technology. He is also an editorial member of the *International Journal of Computer Virology and Hacking*, among others.

Supratip Ghose graduated from the Department of Applied Physics and Electronics, University of Rajshahi, with BSc and MSc in 1995 and 1998, respectively, and received his PhD in Information Engineering from the Department of Computer Science and Information Engineering, Inha University, South Korea, in 2007. He began his academic career as an Adjunct Lecturer at Inha University. After obtaining his PhD, he served as an Assistant Professor in the Department of Computer Science and Engineering in UIC-BNU-HKBU in Zhuhai, China, at the University of Saint Joseph, Macau, China, and at Brac University in Dhaka, Bangladesh. He is currently an Associate Professor in the Department of Computer Science and Engineering, University of Information Technology and Sciences, Dhaka, Bangladesh. His research interests include data mining, collaborative filtering, sentiment analysis in social webs, IR frameworks, and activity recognition in smartphones.

Kyungyong Chung is a Professor in the Computer Information Engineering Department of Sangji University, Korea. He has worked for the Software Technology Leading Department of Korea IT Industry Promotion Agency (KIPA) in 2005. He received his BS, MS and PhD in Computer and Information Engineering from Inha University in 2000, 2002, and 2005, respectively. His research interests are in data mining, smart health services, knowledge-based decision support systems, intelligent systems, convergence, HCI, and recommendation systems. He served as the General co-Chair of the International Conference on Information Science and Application in 2013, General co-Chair of 2nd International Conference on IT Convergence and Security in 2012, Executive Editing Director and in the Steering Committee of the International Conference on Convergence Technology, and steering committees member of the International Conference on Digital Policy and Management. He is on the editorial boards of several international journals.

Hye-Jung Jang is the Executive Secretary of the Society of Digital Policy and Management, Korea. She has supervised and managed many conferences, including the International Conference on Digital Policy and Management (ICDPM), the International Conference on Convergence Technology (ICCT), and the International Conference for Small and Medium Business (ICSMB). Her research topics are contents design, HCI, intelligent systems, IT convergence, ubiquitous computing, serious games, game planning, and recommendation systems. Furthermore, she has controlled special issues of prestigious international journals and is an editorial board member for several international journals.

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This issue contains a collection of the best papers from the International Conference on Digital Policy and Management 2013, which was held on Jeju Island, Korea, from October 24–26, 2013. The main goal of the International Conference on Digital Policy and Management is to bring researchers from academia together with professionals from different industries to share algorithms, solutions, and architectures, as well as their experiences. As such, we believe this conference is one of the most comprehensive for solving problems in multimedia computing, as well as for providing industry security. Multimedia services allow people to access rich multimedia content anytime, anywhere, using many devices and different networks. We anticipate multimedia services to change the way we operate and interact with the world thanks to the development of numerous interesting multimedia applications. Multimedia computing in ubiquitous environments poses many research challenges. One of the challenges is processing overhead in a poor service environment (Oh et al., 2014a). Therefore, not only novel techniques, architectures, algorithms, and experiences regarding multimedia applications should be considered, but also security services along the line, need to be taken into account (Boutaba et al., 2014; Kim and Chung, 2014; Oh et al., 2014b, 2014c; Kim and Ryu, 2013). This issue focuses on novel research into services, applications, infrastructure, and applied real-world engineering for industry security in multimedia computing. Some of these research areas are listed below.

- video surveillance, multimedia security and content protection
- multimedia communications and networking security
- peer-to-peer networking and security in mobile and wireless networks
- security cost mitigation in distributed environments
- mobile agents and security
- instruction-, thread-, and memory-level parallelism and security
- sensor, broadband and high-performance network security.

The paper by Kang et al. presents a security method to fit into smart work environments through research into mobile security technology. Component technologies necessary for mobile virtualisation-based security technology in smart work environments are also researched. This paper will help businesses and government agencies determine security considerations when adopting smart work environments in the future.

The paper by Kim and Hong presents an algorithm for the provision of traffic safety information that reduces traffic accidents by providing drivers with real-time changes in safe speeds, which vary according to the weather conditions. This research could ensure drivers' safety by providing useful information for drivers since it can show them changing safe speeds on a real-time basis, considering changes in weather conditions. A simulation experiment confirmed that the probability of fault detection improved by 30%, compared to the existing method.

The paper by Choi presents a content security technique for digital holographic display systems. A digital holographic display system assumes that it faithfully follows the current system frame in processes such as image acquisition, processing, transmission, reception and reconstruction when providing 2D or 3D video services. In this paper, two applications of the proposed encryption technique are discussed. In the

first, only depth-maps are encrypted, and in the second, depth-maps and red-green-blue (RGB) image information are encrypted simultaneously. The experiment results reveal that 0.73% of the entire data are encrypted and that the proposed technique can effectively hide the visual information of an original RGB image and depth-map.

The paper by Lee presents an interference cancellation scheme for wireless orthogonal frequency-division multiplexing (OFDM) mesh networks in order to reduce interference and improve system performance. They introduce a novel, layered interference cancellation scheme. Through computer simulations, they demonstrate that the interference cancellation scheme is effective in wireless multimedia sensor networks (WMSNs) and provides a convenient means by which to recover signals with a low signal-to-noise ratio (SNR). They demonstrate that the proposed system achieves good error performance and provides effective and flexible interference cancellation in WMSNs.

This fine collection of papers was accumulated by fruitful collaboration. We gratefully acknowledge and express our heartfelt appreciation to all the authors for their excellent contributions to this issue. We would also like to thank all the members of the SDPM, ICDPM Program Committee and anonymous reviewers for their help in identifying novel papers and for their careful reading of earlier drafts to select four high-quality papers. Furthermore, we would like to thank Professor Eldon Y. Li, Editor-in-Chief of the *International Journal of Information and Computer Security*, for his valuable remarks and help throughout the publication process of this issue.

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