

## Preface

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**Biographical notes:** Jong Hyuk Park received his PhD in Graduate School of Information Security from Korea University, Korea. From December 2002 to July 2007, he had been a Research Scientist of R&D Institute, Hanwha S&C Co., Ltd., Korea. From September 2007 to August 2009, he had been a Professor at the Department of Computer Science and Engineering, Kyungnam University, Korea. He is now a Professor at the Department of Computer Science and Engineering, Seoul National University of Technology, Korea. He is the Editor-in-Chief (EiC) of *International Journal of Information Technology, Communications and Convergence (IJITCC)*, Inderscience. He was EiC of the *International Journal of Multimedia and Ubiquitous Engineering (IJMUE)* and the *International Journal of Smart Home (IJSH)*. He is an Associate Editor/Editor of 14 international journals including eight journals indexed by SCI(E). His research interests include security and digital forensics, ubiquitous and pervasive computing, context awareness, multimedia services, etc.

Jong-Hyouk Lee received his PhD in Electrical and Computer Engineering from Sungkyunkwan University. He is a Managing Editor of *International Journal of Information Technology, Communications and Convergence (IJITCC)*, Inderscience, an Associate Editor of Security and Communication Networks (SCN), Wiley InterScience, and a Co-founder of the *International Workshop on Mobility Modeling and Performance Evaluation (MoMoPE)*. He twice received the Excellent Research Awards from Department of Electrical and Computer Engineering, Sungkyunkwan University. His biography is included in the 2011–2012 (11th) Edition of Who's Who in Science and Engineering. He is now developing a solution to make efficient and secure communications for NEMO-based vehicular networks in IMARA Team, INRIA, France. He has recently worked for the GeoNet European project (IPv6 GeoNetworking) and for the MobiSEND French national project. His research interests include mobility management, security, and performance analysis based on protocol operations for next-generation wireless mobile networks.

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The *International Journal of Information Technology, Communications and Convergence (IJITCC)*, which aims at being a high-quality peer-reviewed international journal featuring innovative scientific articles covering all aspects of information technology, communications, and convergence, releases its second issue of the first year with feature seven articles.

This second issue starts with an article by Dilip Kumar, Trilok C. Aseri, and R.B. Patel. The article entitled ‘Multi-hop communication routing (MCR) protocol for heterogeneous wireless sensor networks’ addresses challenging issues such as load balancing, lifetime, stability, and energy consumption for heterogeneous wireless sensor networks. The introduced multi-hop communication routing protocol in the article adapts a dynamic cluster election strategy based on weighted probability. The carried analysis results by the author indicate that the network lifetime, throughput and stability are extended. In addition, it enhances the network performance by maintaining remaining energy distribution relatively uniform among sensor nodes.

The second article entitled ‘Modified genetic algorithm for multiobjective task scheduling on heterogeneous computing system’ by O.L. Sathappan, P. Chitra, P. Venkatesh, and M. Prabhu tackle a task scheduling issue in heterogeneous distributed systems. The authors propose a modified genetic algorithm that combines the characteristics of bacteriological and genetic algorithms to solve the task scheduling issue, which is considered as a NP-complete problem. The presented simulation results in this article show that the introduced algorithm can produce the optimal solutions at faster execution times compared to the biobjective genetic algorithm.

D. Surendran, T. Purusothaman, and R.A. Balachandar propose an open and extensible generic interface that can aggregate resource information from widely being used middleware systems such as Globus, gLite and UNICORE in their article entitled ‘A generic interface for resource aggregation in grid of grids’. The detailed operations of the proposed interface with middleware systems are presented and the experiment results are also presented.

The article entitled ‘Exploring consumers acceptance of mobile payments – an empirical study’ by Omaima Bamasak provides a status of mobile payment in Saudi Arabia in term of consumers’ acceptance and a list of recommendations for safe and efficient mobile payment environments for Saudi Arabia. Even if this empirical study on mobile payment focuses on Saudi Arabia that can be applied to other countries, which have similar market environments with Saudi Arabia.

The article entitled ‘Model checking embedded software of an industrial knitting machine’ by T. Reinbacher, M. Horauer, B. Schlich, J. Brauer and F. Scheuer provide a survey of the current model checking mechanisms with analysis results of being used approaches. Because model checking is an essential and important approach for verification of binary code, the conducted survey and analysis results would help to embedded system designers. In addition, the developed multiple abstraction techniques in this article shows the reduced the runtime of the verification process.

The article entitled ‘A comparative study of feature weighting methods for document co-clustering’ by Y. Ye, X. Li, B. Wu and Y. Li address an issue of document clustering and introduces a feature weighting co-clustering algorithm. The performance analysis of the proposed algorithm is conducted with different weighting methods to investigate different effects on the performance. Then, authors of this article indicate that the mutual information weighting method outperforms other methods.

Last but not least, the article entitled ‘Semantic retrieval: an approach to representing, searching, and summarising text documents’ by Vitaly Klyuev and Vladimir Oleshchuk presents new retrieval mechanisms considering semantic relations between words when indexing documents and ordinary English sentences when querying. The authors provide some actual examples showing the advantage of their mechanisms compared to the traditional key word search.

We believe that these seven articles have the good quality and relevance that we expect for developing *IJITCC*. Finally, we would like to thank all authors, reviewers, and members of the editorial board of *IJITCC*.