Foreword and Editorial

International Journal of Wireless and Mobile Communication for Industrial Systems

We are very happy to publish this issue of an International Journal of Wireless and Mobile Communication for Industrial Systems by Global Vision School Publication.

This issue contains 4 articles. Achieving such a high quality of papers would have been impossible without the huge work that was undertaken by the Editorial Board members and External Reviewers. We take this opportunity to thank them for their great support and cooperation.

The paper entitled "A Study on Perceived Characteristics of Mobile Payment System and Continuous Usage Intention", the purpose of this study is to identify the factors affecting the intention to use mobile payment system users. Especially, the characteristics of mobile payment system are one of the important determinants of user's continuous usage intention. However, the main determinants of mobile payment systems differ among scholars. This study focuses on the relationship between characteristics of the payment system perceived by the users and the continuous usage intention. This study compared the existing researches about the major determinants of mobile payment systems, and identified three important determinants. We investigate how the compatibility, completeness, and utility of mobile payment system perceived by users affect the intention of users to use continuously.

In the paper "Providing Group Workspaces Using Cassandra Database over the Ethereum Blockchain", recently, Ethereum decentralized applications use off-blockchain storage interworking techniques in storing large-sized data. However, these techniques have difficulties in user authentication and access control with off-blockchain storage. In this paper, we propose a method of providing a group workspace that can manage large files based on the Ethereum blockchain. To do this, we introduce the system structure for interworking with off-blockchain storage, and propose the process of handling large size files on the Cassandra database. The proposed process supports robust user authentication using user's signature information, and systematic access control for shared resources.

The paper entitled "Synchronous Client-Server Interaction Mechanism for Event-based Asynchronous Communication Framework", this paper proposes a communication framework (CM) that supports both of synchronous and asynchronous communication between a client and a server. Original CM is an event-based asynchronous communication framework and provided applications with communication services only in the asynchronous manner. The extended CM provides synchronous communication mechanism using a non-blocking socket channel. Because applications can use both the asynchronous and synchronous communications, they can apply communication services to broader contexts. For performance analysis, we compared the asynchronous and synchronous methods with the quantitative experiment. The experiment result shows that the server-response delay of the synchronous communication is shorter than that of the asynchronous case.

In the paper "OFDM Performance Evaluation under Different Fading Channels (AWGN, Rayleigh and Rician)", Orthogonal Frequency division multiplexing (OFDM) technique is an

efficient modulation technique used in certain wired and wireless application. This paper discusses the performance of OFDM system using various fading channels such as AWGN, Rayleigh and Rician. Bit error rate is calculated for different fading channels for QPSK and QAM modulation.Matlab simulink tool is used to model the OFDM system.

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