

GUEST EDITORIAL PREFACE

Special Issue on Advanced Information Technologies and Applications, Part 1

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Welcome to the special issue of the International Journal of Interdisciplinary Telecommunications & Networking. This is a special issue addresses information technology from a broad interdisciplinary perspective. In keeping with the journal's mission this issue is dedicated to new results from high-quality original interdisciplinary academic and practitioner research, surveys, and case studies which address information technology related issues, answer questions, or solve problems. The aim of this special issue is to bring together interdisciplinary researchers and professionals of both advanced information technologies and applications. Topics addressed include advanced information science, information technologies, wireless communication systems, and other key technologies which include cloud computing, networking, security, and related applications. Six articles are included from open submissions and selected articles from 2014 Cross-Strait Conference on Information Science and

Technology, which was held on August 23-25, 2014, Beijing, China. All articles were refereed.

The papers included in this special issue are more technical in nature. The first article, by Y. Zhao, attempts to provide a clear focus on making the optimal choice of the most suitable knowledge transfer model within the strategic alliance in telecommunication industries. The authors put forward a platform and function structure with four kinds of alliances, are illustrated. The second article is entitled, Exploration on Security Association (SA) Query Mechanism in IEEE 802.11w, by Y. Lu. The paper proposes novel approaches to solve the hidden security problems of the IEEE802.11i in wireless LAN by the implementation of the SA Query Mechanism. They also discussed certain security risks of the proposed mechanisms. The third article, by J. Wang, proposes a CPS-based simulation method for the indoor thermal comfort control problem which is based on multi-agent technology. They analyzed different human models

based on comfort and energy cost to show the effectiveness of simulation and potential of energy saving. The fourth article, by X. Sun, proposes a dynamic data privacy protection strategy based on Consistency-Availability-Partition (CAP) tolerance theory. They suggested three privacy protection strategies, focusing on the balance between data consistency and response time, data consistency and data availability, as well as response time and availability respectively. The fifth article, by C-H. Tsai, proposes a novel method to improve the data collection of web crawler and the design of job scheduling. With the proposed concept of object structured design and the concept of distributed depth first data collection, every web crawler cooperates with each other. It greatly decreases the time of website blocking and incomplete data collection and increase the convenience of future system maintenance. The final article, by X. Cai, addresses the issue of data integrity protection for increasingly widespread applied SSD (Solid State Disk, SSD). The authors propose Combinatorial Group Theory, mapping data objects in SSD validation process and test object in com-

bination group testing methods, using the non-adaptive mode to the initial calculation, stored procedures, and re-calculate, verify process, and carefully selecting the design parameters to construct the test matrix of Combinatorial Group Testing method in response to different application environments.

Finally, we would like to thank the authors for their valuable contributions and the reviewers for their time and efforts in providing many valuable suggestions and comments. We particularly wish to express our gratitude to the Editors-in-Chief, Michael R. Bartolacci and Steven R. Powell, and IGI's staff, for their kind support in the preparation of this special issue. We sincerely hope that IJITN's audience will enjoy reading this issue.

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