Special Issue on Current Research in Computer Science and Information Technology

Guest Editorial

Computer Science and Information Technology have been playing more and more important roles in human life, and their applications have been deep-going almost all fields of today society. As with previous industrial revolution, Computer Science and Information Technology revolution stems from the current major innovation in science and technology, promotes the tremendous progress to world productive forces, and promotes the new stage of modern human civilization. The greater and greater demands of human civilization and society progress have been giving the special more giant feedback acting force to develop both Compute Science and Information Technology.

Organized by International Information Technology and Applications Association (IITAA), "International Forum on Information Technology and Applications (IFITA)" and "International Forum on Computer Science-Technology and Applications (IFITA)" were successfully held annually since 2009, which aimed to supply the scholar interchange platforms for the researchers all over the world. Some researches and findings in Computer Science, Information Technology and their applications are selected here:

"**A Fast and Efficient Algorithm for Finding Frequent Items over Data Stream**" presented a fast and efficient algorithm called λ-Count for computing frequency counts over a user specified threshold on a data stream.

"**An Improved PSO Algorithm with Object-Oriented Performance Database for Flight Trajectory Optimization**" gave an improved particle swarm optimization algorithm with object-oriented performance database.

"**A Novel Strategy for Mining Frequent Closed Itemsets in Data Streams**" presented an algorithm Stream_FCI for mining the frequent closed itemsets from data streams in the model of sliding window.

"**Relationship between Decision Styles and Decision Types for Innovative Opportunities: Empirical Study on Chinese Internet of Things Industry and the Cognitive Decision Support Approach**" studied the cognitive decision support approach applied in Chinese Internet of Things Industry.

"**A Wavelet Neural Networks License Recognition Algorithm and Its Application**" proposed a novel algorithm for vehicle license localization and character recognition which is based on adaptive wavelet neural networks

"**An Improved Approach for Materialized View Selection Based on Genetic Algorithm**" studied an improved genetic algorithm to solve the materialized view selection problem under query cost constraints.

"**A Personalization Recommendation Method Based on Deep Web Data Query**" proposed a user interest model based on fine-grained management of structured data and a similarity matching algorithm based on attribute eigenvector in allusion to personalization recommendation..

"**A New Hybrid Grid Multiple Model Estimation Based on STF**" presents a hybrid model grid variable structure multiple model algorithm basing on strong tracking filter using state estimation for complicated system

"**The Application of Support Vector Machine in Load Forecasting**" proposes a combinational model on the basis of Support Vector Machine (SVM) theory for in load forecasting.

"**Research on the Multi-attribute Decision Making Model Based on the Possible Regret Degree of the Policy-maker**" advances a Multi-attribute Decision Making Model which could suite to the risk preference of policy-makers.

"**E-DPSO Algorithm Design and Demonstration about Dynamic Selection and Merging Process of ac-Service Flow**" designs a flexible evolution algorithm E-DPSO based on discrete particle swarm for satisfying flexible of flows.

"**Parallel Implementation of Xvid Decoder on Multi-Core**" chooses Intel isomorphic quad-core processor as hardware platform, Linux as OS, and use Intel parallel runtime library TBB to transform the decoder.

"**A Pervasive Computing Model of Internet of Things based on Computing Area Network**" presents a new control system model of computing area network (called CAN-CSM) based on the new hierarchy computing model of pervasive computing.

"**The Influence of Perceived Value and Trust on Online Buying Intention**" aims to find out perceived value and trust's influence on online buying intention.

"**Discussion on the application of GPS Using in Marine Construction Survey**" introduced the major tasks, specific processes, problems' solutions and some useful experiences of positioning in mattresses laying under the water based on GPS.

"**A Fast New Cryptographic Hash Function Based on Integer Tent Mapping System**" proposes a novel one-way Hash function which is based on the Coupled Integer Tent Mapping System and termed as THA (THA-160, THA-256).

"**Research and Improvement on PXE Security of Dynamic Distributed Network of Non-Fixed Disk**" studies the applications of diskless tech and dynamic distributed security system on data storage based on PXE Security improved

"**Empirical Study on the Correlation between the Internal Control and Enterprise Value -- Based on the Information System**" combines internal control and information technology in controlling internal management and improving enterprise value.

"**The Design and Application of Intelligent Electrical Outlet for Campus's Electricity Saving and Emission Reduction**" researches on environmental protection's intelligent techniques applied in Campus's Electricity Saving and Emission Reduction.

"**Analysis of Load Factors Based on Interpretive Structural Model**" discussed how to establish and simulate power load forecasting model with ISM-based risk analysis, control and management.

If the readers of this Special Issue could find and would enjoy something (such as the academic ideas, methods and enlightening) from the papers in this Special Issue, our target is realized. .

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Qihai Zhou (1947-) is a Full Professor (from 1995), Doctor's (and Master's) tutor and a head of Information Technology Application Research Institute, School of Economic Information Engineering, Southwestern University of Finance and Economics (SWUFE), China. He graduated in 1982 from Lanzhou University, China; has been working in SWUFE since 1982, successively hold posts from teaching assistant (1982-1987), lecturer (1987-1991), vice professor (1991-1995, promoted anomaly in 1991), professor (1995-today, promoted anomaly in 1995); and got the titles of both "Outstanding experts (enjoyed government subsidies) with outstanding contributions of Sichuan province, China" (summa cum laude of Sichuan province government, 1996) and "One hundred academic and managerial leading heads of China informationalization" (summa cum laude about this domain in China, 2006). He has published 46 academic books and over 212 academic papers; and is President of IITAA (International Information Technology & Applications Association), Chair or Organizing Chair of some important international conferences. His research interests are in algorithm research, computational geometry, isomorphic information processing, economics & management computation, eBusiness, and so on. More about Prof. Zhou Qihai is shown here: http://www.iitaa.com/member-ZhouQiHai.doc

Xuejun Zhang (1969-) is a Full Professor (from 2007) of School of Computer, Electronics and Information in Guangxi University. He got PhD Degree in 2004 from Graduate School of Engineering, Electronics and Information Systems Engineering Division, Gifu University, Japan;, he has successively hold posts from vice professor (2004-2007), professor (2007-today) in Guangxi University; He has published over 60 academic papers and received several Prizes at different Outstanding international conferences such as Certificate of Merit (November 25-30, 2001 in Chicago, Illinois, USA. Radiological Society of North America (RSNA) 87th Scientific Assembly & Annual Meeting), Poster Award 1st Prize (June 22 - 25, 2005 Berlin, Germany. Computer Assisted Radiology and Surgery, 19th International Congress and Exhibition), Excellence in Design (November 26- December 1, 2006 in Chicago, Illinois, USA. Radiological Society of North America (RSNA) 92nd Scientific Assembly & Annual Meeting). He was also a Visiting Professor of the University of Bremen at MeVis (Center for Medical Diagnostic Systems and Visualization) in 2006, Bremen, Germany; and now visiting in Department of Intelligent Image Information, Division of Regeneration and Advanced Medical Science, Graduate School of Medicine, Gifu University from 2010. His research interests are Medical Image Processing, Computer-Aided Diagnosis, pattern recognition, Microwave digital signal processing, and so on.