Special Issue on Recent Advances in Information Processing & Intelligent Information Systems and Applications

Track on Software

Guest Editorial

This special issue comprises of thirteen selected papers from the International Symposium on Information Processing 2009(ISIP 2009), Huangshan, China, 21-23 August 2009 and International Symposium on Intelligent Information Systems and Applications 2009 (IISA 2009), Qingdao, China, 28-30 October 2009. The conference received 623 papers submissions from 11 countries and regions, of which 320 papers were selected for presentation after a rigorous review process. From these 320 research papers, through two rounds of reviewing, the guest editors selected thirteen as the best papers on the Software track of the Conference. The candidates of the Special Issue are all the authors, whose papers have been accepted and presented at the ISIP 2009 and IISA 2009, with the contents not been published elsewhere before.

The ISIP 2009 are Co-sponsored by Jiaxing University, China, Peoples' Friendship University of Russia, Russia, Nanchang HangKong University, China, Sichuan University, China, Hunan Agricultural University, China, National Chung Hsing University, Taiwan, Guangdong University of Business Studies, China, Academy Publisher of Finland, Finland.

The IISA 2009 are Co-sponsored by Qingdao University of Science & Technology, China; Peoples' Friendship University of Russia, Russia; Nanchang HangKong University, China; National Chung Hsing University, Taiwan; Hunan Agricultural University, China; Guangdong University of Business Studies, China; Jiaxing University, China. Technical Co-Sponsors of the conference are IEEE, IEEE Shandong Section, IEEE Shanghai Section.

"A Novel Medical Image Dynamic Fuzzy Classification Model Based on Ridgelet Transform", by Zhiming Cui and Guangming. Zhang, proposes a novel classification model for medical image, which is using ridgelet transform and dynamic fuzzy theory.

"The Generalization of WOSF and Corresponding Outputs", by Wei-Chih Chen and Jyh-Horng Jeng, proposes three translated formulas to fast generate corresponding outputs of BF equivalent classes, not perform extra machine training or mathematical computation.

"Application of Probabilistic Causal-effect Model based Artificial Fish-Swarm Algorithm for Fault Diagnosis in Mine Hoist", by Wang Chu-Jiao and Xia Shi-Xiong, proposes combine probabilistic causal-effect model, the improved distance evaluation technique and ASFA, and then propose a new approach to intelligent fault diagnosis of mine hoist.

"Topic Tracking with Dynamic Topic Model and Topic-based Weighting Method", by Xiaoyan Zhang, and Ting Wang. This paper uses the improvements for the topic tracking. As a main task of TDT, topic tracking is to associate incoming stories with a topic and find all the stories related to it in a stream of stories.

"A Novel Probabilistic Model for Dependency Parsing", by Shixi Fan, Xuan Wang and Xiaolong Wang,proposes a new approach for dependency parsing which considers both arcs and their relationships. Unlike native probabilistic and deterministic models that ignore the relationship of the arcs, our approach uses the principle of case grammar and integrates word knowledge into the parsing procedure.

"Integrating the Use of Spreadsheet Software and VBA in Inventory Simulation", by Changbing Jiang, reviews the advantages and disadvantages of computer programming and spreadsheet modeling in logistics education and inventory control, and describes using Microsoft Excel and VBA in the classroom.

"A Novel Method for Extracting Information from Web Pages with Multiple Presentation Templates" by Li Qingzhong, Ding Yanhui, Feng An and Dong Yongquan. In this paper, focuses on the extraction problem about web pages with multiple presentation templates. Four different kinds of this problem have been considered, and a novel method based on path entropy, presentation regularity and ontology knowledge is presented.

"The Formal Model of DBMS Enforcing Multiple Security Polices", by Yongzhong He, Zhen Han, Huirong Fu and Guangzhi Qu. In this paper, a formal security policy model of DBMS supporting multiple security policies is proposed, based on which we enhanced the open source DBMS PostgreSQL to enforce multiple security policies and aimed to boost its security level to TCSEC B2.

"REA-based Enterprise Business Domain Ontology Construction", by Guoqiang Zhang, Suling Jia, Qiang Wang and Qi Liu, analysis REA model from basic and extent model perspective, and then a two-layer architecture is proposed. The paper also studies how to constructing REA-based enterprise business domain ontology with OWL.

"Combining self learning and active learning for Chinese Named Entity Recognition", by Lin Yao, Chengjie Sun, Xiaolong Wang and Xuan Wang,proposes a combination of active learning and self-training method to reduce the labeling effort for Chinese Named Entity Recognition (NER).

"A Study on the Influencing Factors of the Intention to Share Tacit Knowledge in the University Research Team", by Zhihong Li, Tao Zhu and Haiyan Wang, proposes a research model about the intention to share tacit knowledge in the

university research team.

"Study on Combining of E-commerce and E-marketing", by Xiaoming Meng, proposes a new concept "e-commerce e-marketing", and focused on six aspects to analyze and study the problems related, such as definition, content, relationship, functions, characteristics, significance and its developing model.

"Organizational Readiness Analysis for Enterprise Information Systems Implementation" by Guoxi Cui and Kecheng Liu, presents an approach for examining and improving organizational readiness for enterprise information systems implementation.

We are particularly grateful to IEEE Fellow Prof. Gary G. Yen, President-Elect of IEEE Computational Intelligence Society and Editor-in-Chief of IEEE Computational Intelligence Magazine, Oklahoma State University, USA; IEEE Fellow Prof. Jun Wang from Chinese University of Hong Kong, Hong Kong; IEEE Fellow Prof. Derong Liu, Associate Editor of IEEE Trans. on Neural Networks, University of Illinois at Chicago, USA; IEEE & IET Fellow Prof. Chin-Chen Chang from National Chung Hsing University, Taiwan, and Chair of IEEE Shanghai Section; and Prof. Junfa Mao at Shanghai Jiaotong University, China. for accepting our invitation to deliver invited talks at this year's conference

We wish to thank the Jiaxing University, China and Qingdao University of Science & Technology, China for providing the venue to host the conference. We would like to take this opportunity to thank the authors for the efforts they put in the preparation of the manuscripts and for their valuable contributions. We wish to express our deepest gratitude to the program committee members for their help in selecting papers for this issue and especially the referees of the extended versions of the selected papers for their thorough reviews under a tight time schedule. Last, but not least, our thanks go to the Editorial Board of the Journal of Software for the exceptional effort they did throughout this process.

The ISIP 2010 will be held in Guangdong University of Business Studies, China, we are looking forward to seeing you in Guangdong University of Business Studies, China.

In closing, we sincerely hope that you will enjoy reading this special issue.

Guest Editors:

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Fei Yu was born in Ningxiang, China, on February 06, 1973. Before Studying in Peoples' Friendship University of Russia, Russia, He joined and worked in Hunan University, Zhejiang University, Hunan Agricultural University, China. He has wide research interests, mainly information technology. In these areas he has published above 50 papers in journals or conference proceedings and a book has published by Science Press, China (Fei Yu, Miaoliang Zhu, Cheng Xu, et al. Computer Network Security, 2003). Above 30 papers are indexed by SCI, EI. He has won various awards in the past. He served as many workshop chair, advisory committee or program committee member of various international ACM/IEEE conferences, and chaired a number of international conferences such as IITA'07, ISIP'08, ISECS'08 ISIP'09, ISECS'09 and ISISE'08. He have taken as a guest researcher in State Key Laboratory of Information Security,

Graduate School of Chinese Academy of Sciences, Guangdong Province Key Lab of Electronic Commerce Market Application Technology, Jiangsu Provincial Key Lab of Image Processing and Jiangsu Provincial Key Laboratory of Computer Information Processing Technology.

Chin-Chen Chang was born in Taichung, Taiwan on Nov. 12th, 1954. He obtained his Ph.D. degree in computer engineering from National Chiao Tung University. He's first degree is Bachelor of Science in Applied Mathematics and master degree is Master of Science in computer and decision sciences. Both were awarded in National Tsing Hua University. Dr. Chang served in National Chung Cheng University from 1989 to 2005. His current title is Chair Professor in Department of Information Engineering and Computer Science, Feng Chia University, from Feb. 2005.

Prior to joining Feng Chia University, Professor Chang was an associate professor in Chiao Tung University, professor in National Chung Hsing University, chair professor in National Chung Cheng University.

He had also been Visiting Researcher and Visiting Scientist to Tokyo University and Kyoto University, Japan. During his service in Chung Cheng, Professor Chang served as Chairman of the Institute of Computer Science and Information Engineering, Dean of College of Engineering, Provost and then Acting President of Chung Cheng University and Director of Advisory Office in Ministry of Education, Taiwan.

Professor Chang has won many research awards and honorary positions by and in prestigious organizations both nationally and internationally. He is currently a Fellow of IEEE and a Fellow of IEE, UK.



Jian Shu was born in Jiangxi, China, on May 25,1964, received his B.S. degree in computer science from North-western Polythenical University, Xian, China, in 1985, M.S. degree in computer networks from North-western Polythenical University, in 1990.

He was a lecture from 1992 to 1997, and was an associate professor from 1998 to 2002 in school of computing, Nanchang Hangkong University, Nanchang, China. He was a Visiting Researcher, Department of physics and computing, Wilfrid Laurier University, Ontario, Canada, from August,2001 to August,2002. He is currently a professor in School of Computing, Nanchang Hangkong University. His research interests include Wireless Sensor Networks and Load Balancing.

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Gui-Ping Liao was born in Hunan, China, on November 11, 1964. He received the M.S. degree in ecology from Institute of Applied Ecology Research, Chinese Academy of Sciences, China, in 1994, and Ph.D. degree in agronomy from Hunan Agricultural University, China, in 2000. He was a Post Doctor of School of Computer, National University of Defense technology, China, from November, 2004 to November, 2005. He was a Visiting Scientist of the Plant Biotechnology Institute (PBI) of National Research Council, Canada, form November, 2004 to November, 2005.

He is currently a director of Institute of Agricultural Information technology, and a professor and Ph.D supervisor of School of Information Sceince and Technology, Hunan Agricultural University. His research interests include expert system, intelligent information processing, and computer

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Guangxue Yue was born in 1963, Guizhou, China. He obtained his master in Hunan University. Professor, the College of Mathematics & Information Engineering, Jiaxing University, China. His main research interests include Distributed Computing & Network, Network Security, and Hybird & Embedded Systems. In these areas he has published above 30 papers in leading journals or conference proceedings, above 20 papers are indexed by SCIE, EI. He served as many workshop chairs, advisory committee or program committee member of various international IEEE conferences, and chaired a number of international conferences such as ISECS'08, ISIP'09, ISECS'09 and ISISE'08. He have taken as a guest researcher in Jiangxi University of Science and Technology, Jiangsu Polytechnic University, State Key Laboratory for Novel Software Technology at Nanjing

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