

Special Issue: Recent Advances in Electronic Commerce and Security & Web Information Systems and Applications

Selected Best Papers of International Symposium on Electronic Commerce and Security 2009 (ISECS 2009) & International Symposium on Web Information Systems and Applications 2009 (WISA 2009)

Track on Multimedia

Editorial

This special issue comprises of eight selected papers from the International Symposium on Electronic Commerce Security (ISECS 2009), Nanchang, China, 22-24 May 2009. The conference received 1050 paper submissions from 19 countries and regions, of which 487 were selected for presentation after a rigorous review process. From these 487 research papers, through two rounds of reviewing, the guest editors selected twelve as the best papers on the Computers track of the Conference. The candidates of the Special Issue are all the authors, whose papers have been accepted and presented at the ISECS 2009 and WISA 2009, with the contents not been published elsewhere before.

The ISECS 2009 and WISA 2009 are sponsored by Nanchang HangKong University, China, Peoples' Friendship University of Russia, Nanchang University (China), Jiangxi Normal University (China), Wuhan University (China), National Chung Hsing University (Taiwan), Institute of Software, Chinese Academy of Sciences, Sichuan University (China), and Jiaying University (China). Technical Co-Sponsors of the conference are IEEE, IEEE Computer Society, and IEEE Computer Society Technical Committee on E-Commerce.

“A Novel Ideal Contrast Visual Secret Sharing Scheme with Reversing”, by Haibo Zhang, Xiaofei Wang and Youpeng Huang, proposes a scheme with reversing based on a PBVSS scheme. It achieves really ideal contrast within only $[m/h]$ runs and encodes the secret image block by block without pixel expansion. It is suitable for any access structure and also can be applied to encrypt gray-scale and chromatic images.

“A Robust Watermarking and Image Authentication Scheme used for Digital Content Application”, by C. M. Kung, S. T. Chao, Y. C. Tu, Y. H. Yan, and C. H. Kung, proposes a frequency domain scheme developed expressly for oblivious watermarking and signature process are presented. It uses the self-information of coefficients of the middle frequency in the host image, and explicitly takes in the cross-correlation between coefficients of the middle frequency and the watermark. And signature process that input is the edge properties extracted from the image. The signature can be correctly verified when the image is incidentally damaged such as lossy compression.

“A Powerful Partial Relevance Feedback for 3D Model Retrieval”, by Baokun Hu, Yusheng Liu, Shuming Gao, Jing Hu, Rui Sun, proposes the PRF in 3D model retrieval proposed in previous work. In the proposed PRF method, each model is decomposed into several local parts, and the global similarity of two models is regarded as the total similarity of all the local parts.

“DSA Image Fusion Based on Dynamic Fuzzy Logic and Curvelet Entropy”, by Guangming Zhang, Zhiming Cui, Fanzhang Li, Jian Wu, analyzes the characters of DSA medical image, and proposes a novel approach for DSA medical image fusion, which is using curvelet information entropy and dynamic fuzzy logic.

“Off-Line Persian Signature Identification and Verification Based On Image Registration and Fusion”, by Samaneh Ghandali, Mohsen Ebrahimi Moghaddam, a method for off-line Persian signature identification and verification is proposed that is based on Image Registration, DWT (Discrete Wavelet Transform) and Image Fusion.

“Lossless data hiding scheme using adjacent pixel difference based on scan path”, by Xianting Zeng, Lingdi Ping, Zhuo Li, proposes a new lossless data hiding scheme using adjacent pixel difference based on scan path. Nine basic scan paths are defined, and this means all-directional adjacent pixel differences can be obtained.

“A Novel Self-adaptation Differential Energy Video Watermarking Scheme in Copyright Protection” by Tanfeng Sun, Xinghao Jiang, Shusen Shi, Zhigao Lin, Guanglei Fu, proposes a novel self-adaptation differential energy watermarking based on the Watson visual model, which inserts robust watermark into video streaming according to the differential energy theory.

“A Secure and Efficient Buyer-Seller Watermarking Protocol”, by Yuping Hu, Jun Zhang, a novel buyer-seller watermarking protocol is proposed for piracy tracing, in which a memoryless Watermark Certification Authority (WCA) can offer a number of watermarks for a buyer simultaneously, avoiding itself being involved in each digital transaction operated between the buyer and the seller.

We are particularly grateful to Guangnan Ni, Chin-Chen Chang, Jen-Yao Chung, Ben M. Chen, and Dongfen Yuan for accepting our invitation to deliver invited talks at this year's conference. We wish to thank the Nanchang HangKong University, China for providing the venue to host the conference. In particular, we would like to acknowledge School of Computing, Nanchang HangKong University, China, who has worked throughout the year in preparation for this 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 Multimedia for the exceptional effort they did throughout this process.

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

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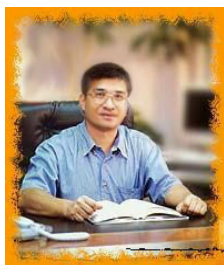
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Fei Yu was born in Ningxiang, China, on February 06, 1973. Before Studying in Peoples' Friendship University of Russia, Russia, He joined and worked in Hunan University, Zhejiang University, Hunan Agricultural University, China. He has wide research 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.



Deng-Yi Zhang was born in Jingzhou, Hubei Province, China on Feb. 7th, 1965. He obtained his master degree in Computer Science, and his first degree is Bachelor of Electronic Engineering and Computer Science, both in Wuhan Technological University of Surveying and Mapping which was renamed as Wuhan University in 2001. He has been serving in Wuhan University from 1988 to now. He is currently the Deputy Dean of Computer School and the Deputy Dean of Key Laboratory of Education Ministry for Spatial Information Security and Trusted Computing.

His research interest includes Electronic Technology, Embedded Technology, Computer Vision and Pattern Recognition. And he is currently a Fellow of Chinese Institute of Electronics Embedded Expert Committee.



Jie-Xian Zeng was born in Jiangxi China, on October 23, 1958. He received the Master degree from Northwestern Polytechnical University, China, in 1997. He is currently Professor with School of Computing of Nanchang Hangkong University.

His major research interests include image processing, theoretical graphics, computer vision, and pattern recognition. He has published more than 40 papers in the above areas, in leading journals and conference proceedings. He is a workshop chair, member of the advisory committee or program committee of many international IEEE conferences. He also served as the chair of several international conferences such as ISECS'08 and ISECS'09. He can be reached by e-mail: Zengjx58@163.com.



Jun Zhang was born in Sichuan, China in 1966. He received his Ph.D degree in computer science from Huazhong University of Science & Technology, China in 2003 and his M.Sc. degree in Mathematics from Lanzhou University in 1993. He had been a visiting postdoctoral Researcher in University College London, UK under Prof. Ingemar Cox's supervision. Now, he is the rector of Information Science School, Guangdong University of Business Studies. His research interest is information security such as data hiding, watermarking and privacy protection. In this field, He has published more than 30 papers. Moreover he had been in charge of some projects sponsored by National Natural Science Foundation of China and Guangdong Natural Science Foundation. 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, ISECS'09 and ISIP'09.