

Special Issue: Recent Advances in Information Technology and Security  
Selected Best Papers of International Symposium on Information Science and  
Engineering 2008(ISISE 2008) & International Symposium on Computer Science  
and Computational Technology 2008(ISCST 2008)  
Track on Software

## Editorial

Communication and Information Technology has taken the world by storm, touches virtually all aspects of our daily lives. It interweaves tightly into our private and public communications, interactions and transactions; inadvertently forms an intricate infrastructure for critical social and institutional functions such as commerce, banking and finance, utilities, national defense, education, entertainment and many more useful applications. The International Symposium on Information Science and Engineering 2008(ISISE 2008) and International Symposium on Computer Science and Computational Technology 2008(ISCST 2008) will bring together researchers from academia and industry, who are interested in the emergent field of information processing. We are soliciting papers that present recent results, as well as more speculative presentations that discuss research challenges, define new applications, and propose methodologies for evaluating and the roadmap for achieving the vision of information processing.

The ISISE 2008 and ISCST 2008 are co-sponsored by Shanghai Institute of Electronics, China, Peoples' Friendship University of Russia, Russia, Guangdong University of Business Studies, National Chung Hsing University, Taiwan, and Jiaying University, China. Much work went into preparing a program of high quality. We received above 2000 submissions, every paper was reviewed by three program committee members and about 600 were selected as regular papers, representing a 30% acceptance rate for regular papers. To encourage the author presentation at ISISE 2008 and ISCST 2008, we have chosen 12 outstanding papers to be published in this special issue. The candidates of the Special Issue are all the authors, whose papers have been accepted and presented at the ISISE 2008 or ISCST 2008, with the contents not been published elsewhere before.

The purpose of ISISE 2008 and ISCST 2008 is to bring together researchers and practitioners from academia, industry, and government to exchange their research ideas and results and to discuss the state of the art in the areas of the symposium. In addition, the participants of the Symposium will hear from renowned keynote speakers IEEE & IET Fellow Prof. Chin-Chen Chang from National Chung Hsing University, Taiwan, IEEE Fellow Prof. Yuhon Hu from University of Wisconsin - Madison, USA and Chair of IEEE Shanghai Section Prof. Junfa Mao from Shanghai Jiao Tong University, China.

We are particularly grateful to for Chin-Chen Chang, Yuhon Hu and Junfa Mao accepting our invitation to deliver invited talks at this year's conference.

We would like to acknowledge the exceptional effort by the Editorial Board of the Journal of Software throughout this process.

Lastly, we wish to express our deepest thanks to the members of the Program Committee, who gave their personal free time to perform the often thankless job of reviewing many papers under extremely short deadlines, and to the volunteers and local assistants who made this program a success.

### Guest Editors:

#### Fei Yu

Peoples' Friendship University of Russia, Russia. Email: [hunanyufei@126.com](mailto:hunanyufei@126.com)

#### Chin-Chen Chang

National Chung Hsing University, Taiwan. Email: [ccc@cs.ccu.edu.tw](mailto:ccc@cs.ccu.edu.tw)

#### Ben M. Chen

National University of Singapore, Singapore. Email: [bmchen@nus.edu.sg](mailto:bmchen@nus.edu.sg)

#### Jun Zhang

Guangdong University of Business Studies, China. Email: [Zhangjundan123@yahoo.com.cn](mailto:Zhangjundan123@yahoo.com.cn)

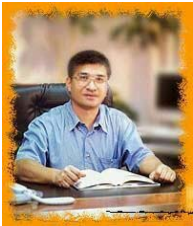
#### Guangxue Yue

Jiaying University, China. Email: [guangxueyue@yahoo.com.cn](mailto:guangxueyue@yahoo.com.cn)



**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, WKDD'2008, 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.



**Ben M. Chen** was born in Fujian, China, on November 25, 1963, received his B.S. degree in mathematics and computer science from Xiamen University, Xiamen, China, in 1983, M.S. degree in electrical engineering from Gonzaga University, Spokane, Washington, USA, in 1988, and Ph.D. degree in electrical & computer engineering from Washington State University, Pullman, Washington, USA, in 1991.

He was a software engineer in South-China Computer Corporation, Guangzhou, China, from 1983 to 1986, and was an assistant professor from 1992 to 1993 in Department of Electrical Engineering, State University of New York at Stony Brook, USA. Since August 1993, he has been with Department of Electrical and Computer Engineering, National University of Singapore, where he is currently a full professor. His current research interests are in robust control, systems theory, control applications and the

development of UAV helicopter systems, and the modeling of financial markets.

He served as the chairman of IEEE Singapore Control Systems Chapter in 2002 and 2003, and the general chair of the 5th IEEE International Conference on Control and Automation held in Budapest, Hungary, 2005. He is currently serving as a member of Technical Committee on Control Theory, Chinese Association of Automation, China (2008- ). He was the recipient of the Best Poster Paper Award at the 2nd Asian Control Conference, Seoul, Korea (1997); University Researcher Award, National University of Singapore (2000); Prestigious Engineering Achievement Award, Institution of Engineers, Singapore (2001); Temasek Young Investigator Award, Defence Science & Technology Agency, Singapore (2003); Best Industrial Control Application Prize at the 5th Asian Control Conference, Melbourne, Australia (2004); and elected to IEEE Fellow, Institute of Electrical & Electronics Engineers (IEEE), USA (2007).



**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.



**Guangxue Yue** was born in 1963, Guizhou, China. He obtained his master in Hunan University. Professor, the College of Mathematics & Information Engineering, Jiaying University, China. His main research interests include Distributed Computing & Network, Network Security, and Hybrid & 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 University, Graduate School of Chinese Academy of Sciences, Guangdong Province Key Lab of Electronic Commerce Market Application Technology.