Preface

Welcome to the Proceedings of the 2nd International Conference on Information Engineering and Applications (IEA 2012), which was held in Chongqing, China, October 26–28, 2012.

As future generation information engineering, information technology and applications become specialized. Information engineering and applications including computer engineering, electrical engineering, communication technology, information computing, service engineering, business intelligence, information education, intelligent system, and applications are growing with ever increasing scale and heterogeneity, and becoming overly complex. The complexity is getting more critical along with the growing applications. To cope with the growing and information engineering and applications focus on intelligent, self-manageable, scalable information systems, engineering and applications to the maximum extent possible without human intervention or guidance.

Information engineering and applications is the field of study concerned with constructing information computing, intelligent system, mathematical models, numerical solution techniques, and using computers and other electronic devices to analyze and solve natural scientific, social scientific, and engineering problems. In practical use, it is typically the application of computer simulation, intelligent system, internet, communication technology, information computing, information education, applications, and other forms of information engineering to problems in various scientific disciplines and engineering. Information engineering and applications is an important underpinning for techniques used in information and computational science and there are many unresolved problems, worth studying.

The IEA 2012 conference provided a forum for engineers and scientists in academia, industry, and government to address the most innovative research and development including technical challenges and social, legal, political, and economic issues, and to present and discuss their ideas, results, work in progress, and experience on all aspects of information engineering and applications.

There was a very large number of paper submissions (1845), and all submissions were reviewed by at least three Program or Technical Committee members or external reviewers. It was extremely difficult to select the presentations for the conference because there were so many excellent and interesting submissions. In order to allocate as many papers as possible and keep the high quality of the

conference, we finally decided to accept 542 papers for presentations, reflecting a 29.4 % acceptance rate. We believe that all of these papers and topics not only provided novel ideas, new results, work in progress, and state-of-the-art techniques in this field, but also stimulated the future research activities in the area of information engineering and applications.

The exciting program for this conference was the result of the hard and excellent work of many others, such as Program and Technical Committee members, external reviewers and Publication Chairs under a very tight schedule. We are also grateful to the members of the Local Organizing Committee for supporting us in handling so many organizational tasks, and to the keynote speakers for accepting to come to the conference with enthusiasm. Last but not least, we hope you enjoyed the conference program and the beautiful attractions of Chongqing, China.

October 2012   Yan Ma
                                                                          Qingsheng Zhu
                                                                          Shizhong Yang
                                                    General and Program Chairs, IEA 2012