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Foreword

As future generation information technology (FGIT) becomes specialized and fragmented, it is easy to lose sight that many topics in FGIT have common threads and, because of this, advances in one discipline may be transmitted to others. Presentation of recent results obtained in different disciplines encourages this interchange for the advancement of FGIT as a whole. Of particular interest are hybrid solutions that combine ideas taken from multiple disciplines in order to achieve something more significant than the sum of the individual parts. Through such hybrid philosophy, a new principle can be discovered, which has the propensity to propagate throughout multifaceted disciplines.

FGIT 2009 was the first mega-conference that attempted to follow the above idea of hybridization in FGIT in a form of multiple events related to particular disciplines of IT, conducted by separate scientific committees, but coordinated in order to expose the most important contributions. It included the following international conferences: Advanced Software Engineering and Its Applications (ASEA), Bio-Science and Bio-Technology (BSBT), Control and Automation (CA), Database Theory and Application (DTA), Disaster Recovery and Business Continuity (DRBC; published independently), Future Generation Communication and Networking (FGCN) that was combined with Advanced Communication and Networking (ACN), Grid and Distributed Computing (GDC), Multimedia, Computer Graphics and Broadcasting (MulGraB), Security Technology (SecTech), Signal Processing, Image Processing and Pattern Recognition (SIP), and u- and e-Service, Science and Technology (UNESST).

We acknowledge the great effort of all the Chairs and the members of advisory boards and Program Committees of the above-listed events, who selected 28% of over 1,050 submissions, following a rigorous peer-review process. Special thanks go to the following organizations supporting FGIT 2009: ECSIS, Korean Institute of Information Technology, Australian Computer Society, SERSC, Springer LNCS/CCIS, COEIA, ICC Jeju, ISEP/IPP, GECAD, PoDIT, Business Community Partnership, Brno University of Technology, KISA, K-NBTC and National Taipei University of Education.

We are very grateful to the following speakers who accepted our invitation and helped to meet the objectives of FGIT 2009: Ruay-Shiung Chang (National Dong Hwa University, Taiwan), Jack Dongarra (University of Tennessee, USA), Xiaohua (Tony) Hu (Drexel University, USA), Irwin King (Chinese University of Hong Kong, Hong Kong), Carlos Ramos (Polytechnic of Porto, Portugal), Timothy K. Shih (Asia University, Taiwan), Peter M.A. Sloot (University of Amsterdam, The Netherlands), Kyu-Young Whang (KAIST, South Korea), and Stephen S. Yau (Arizona State University, USA).

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October 2009

Young-hoon Lee
Tai-hoon Kim
Wai-chi Fang
Dominik Ślęzak

Preface

We would like to welcome you to the proceedings of the 2009 International Conference on Future Generation Communication and Networking (FGCN 2009), which was organized as part of the 2009 International Mega-Conference on Future Generation Information Technology (FGIT 2009), held during December 10–12, 2009, at the International Convention Center Jeju, Jeju Island, South Korea.

FGCN/ACN 2009 focused on various aspects of advances in communication and networking with computational sciences, mathematics and information technology. It provided a chance for academic and industry professionals to discuss recent progress in the related areas. We expect that the conference and its publications will be a trigger for further related research and technology improvements in this important subject.

We would like to acknowledge the great effort of all the Chairs and members of the Program Committee. Out of 260 submissions to FGCN/ACN 2009, we accepted 82 papers to be included in the proceedings and presented during the conference. This gives roughly a 30% acceptance ratio. Seven of the papers accepted for FGCN/ACN 2009 were published in the special FGIT 2009 volume, LNCS 5899, by Springer. The remaining 75 accepted papers can be found in this CCIS volume.

We would like to express our gratitude to all of the authors of submitted papers and to all of the attendees, for their contributions and participation. We believe in the need for continuing this undertaking in the future.

We would also like to acknowledge Jun Zheng (New Mexico Institute of Mining and Technology, USA) and Yan Zhang (Simula Research Laboratory, Norway) for organizing the special session on Wireless Ad Hoc, Mesh, and Sensor Networks.

Once more, we would like to thank all the organizations and individuals who supported FGIT 2009 as a whole and, in particular, helped in the success of FGCN/ACN 2009.

October 2009

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