Message from the Program Chairs

HPCC 2014

With the rapid growth in computing and communications technology, the past decade has witnessed a proliferation of powerful parallel and distributed systems and an ever-increasing demand for practice of high performance computing and communications (HPCC). HPCC has moved into the mainstream of computing and has become a key technology in determining future research and development activities in many academic and industrial branches, especially when the solution of large and complex problems must cope with very tight timing schedules.

The HPCC 2014 conference is the 16th IEEE International Conference on High Performance Computing and Communications. It aims to provide a forum for engineers and scientists in academia, industry, and government to address the resulting profound challenges, and to present and discuss their new ideas, research results, applications and experience on all aspects of high performance computing and communications. The annual HPCC conference is now a very important international event covering not only traditional high performance computing topics but also emerging fields such as service orientation and cloud computing. HPCC-2014 is sponsored by IEEE, IEEE Computer Society, and IEEE Technical Committee on Scalable Computing (TCSC).

The HPCC 2014 conference is the next event in a series of highly successful international conferences on high performance computing and communications (HPCC), previously held as HPCC-13 (Zhangjiajie, China, November 2013), HPCC-12 (Liverpool, UK, June 2012), HPCC-11 (Banff, Canada, September 2011), HPCC-10 (Melbourne, Australia, September 2010), HPCC-09 (Seoul, Korea, June 2009), HPCC-08 (Dalian, China, September 2008), HPCC-07 (Houston, USA, September 2007), HPCC-06 (Munich, Germany, September 2006), HPCC-05 (Naples, Italy, September 2005), HPCN-04 (Tokyo, Japan, December 2004), PACT-SHPSEC03 (New Orleans, USA, September 2003), PACT-SHPSEC02 (Charlottesville, USA, September 2002), HPCA-01 (Nova Scotia, Canada, November 2001), HPNCA-00 (Delft, The Netherlands, May 2000), HPNCA-99 (Amsterdam, The Netherlands, April 1999).

The HPCC 2014 conference received a large number of papers from over 50 countries. The papers cover a wide range of topics, such as Parallel/Distributed Computing Applications and Algorithms, Cloud/Grid Computing, System Architecture, Network Technology, Information Security, and so forth. All papers contained in this proceeding are peer-reviewed and carefully chosen by members of the scientific committee and external reviewers with acceptance rate of 25% for full papers. The conference programme required the dedicated support and tireless effort of many people. Firstly, we are pleased to thank the authors, for creating and submitting their work whose papers are recorded here. Secondly, we are grateful to the programme committee members and the external reviewers for their time, expert and prompt reviewing. Thirdly, we thank the invited speakers for their participation and priceless contribution to the conference. Fourthly, we thank the workshop participants, chairs and the special session chairs for their contribution to the conference. Finally, special thanks to all the local and general organising committee, especially the tracks chairs.

S. Khaddaj, Program Chair of HPCC 2014
J. Bourgeois, General Chair of HPCC 2014
F. Magoules, General Chair of HPCC 2014