

12th IEEE International Conference on High Performance Computing and Communications



Melbourne, Australia

September 1-3, 2010

<http://www.anss.org.au/hpcc2010>



IEEE HPCC 2010 Call For Papers

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-2010 conference is the 12th edition of the highly successful International Conference on High Performance and Communications (HPCC). It provides 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. IEEE HPCC-10 is sponsored by IEEE, IEEE Computer Society, and IEEE Technical Committee on Scalable Computing (TCSC).

HPCC-10 is the next event in a series of highly successful International Conferences on High Performance Computing and Communications (HPCC), previously held as 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). HPCC 2010 will be held in Melbourne, Australia. Since 2002, Melbourne has been consistently ranked in the top three 'World's Most Livable Cities' by The Economist.

Topics of interest include, but not limited to:

- Languages and compilers for high performance computing
- Parallel and distributed system architectures
- Parallel and distributed software technologies
- Parallel and distributed algorithms
- Embedded systems
- Peer-to-peer computing
- Grid and cluster computing
- Web services and internet computing
- Performance evaluation and measurement
- Tools and environments for software development
- Distributed systems and applications
- High-performance scientific and engineering computing
- Database applications and data mining
- Biological/molecular computing
- Collaborative and cooperative environments
- Mobile computing and wireless communications
- Pervasive/ubiquitous computing and intelligence
- Autonomic, reliability and fault-tolerance
- Trust, security and privacy

Submission Guidelines

Submissions must include an abstract, five to ten keywords, the e-mail address of the corresponding author and should not exceed 15 pages, including tables and figures. All paper submissions must represent original and unpublished work. Submission of a paper should be regarded as an undertaking that, should the paper be accepted, at least one of the authors will register for the conference and present the work. Prepare your paper with free styles not more than 15 pages in PDF file. Submit your paper(s) at the HPCC-10 submission site: <http://cse.stfx.ca/~hpcc10/sub/>

Accepted and presented papers will be included into the IEEE Conference Proceedings published by IEEE CS Press (indexed by EI). Authors of accepted papers, or at least one of them, are requested to register and present their work at the conference, otherwise their papers will be removed from the digital libraries of IEEE CS and EI after the conference.

Distinguished papers presented at the conference, after further revision, will be published in special issues of *International Journal of High Performance Computing Applications* (SAGE, indexed by SCI and EI), *International Journal of High Performance Computing and Networking* (Inderscience), *The Journal of Supercomputing* (Springer, indexed by SCI and EI).

General Chairs

Wanlei Zhou, Deakin University, Australia
Erwin Laure, Royal Institute of Technology, Sweden
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Program Chairs

Yang Xiang, Central Queensland University, Australia
Fatos Xhafa, Birkbeck, University of London, UK
Jinjun Chen, Swinburne University of Technology, Australia

Panel Chair

Rajkumar Buyya, University of Melbourne, Australia

Workshop Chairs

Salvatore Venticini, Second University of Naples, Italy
Liang Zhou, ENSTA-ParisTech, France
Yong Meng Teo, National University of Singapore, Singapore

Steering Chairs

Laurence T. Yang, St. Francis Xavier University, Canada
Beniamino Di Martino, Second University of Naples, Italy

Important Dates

Workshop Proposal: April 30, 2010
Authors Notification: June 15, 2010

Submission Deadline: May 15, 2010 (UTC/GMT time 23:59, firm)
Final Manuscript Due: July 1, 2010