Call for Papers

Elsevier Journal of Computer and System Sciences - Special issue on High Performance Computing Architectures and Systems

The authors whose papers have been accepted and presented at the 14th IEEE International Conference on High Performance Computing and Communications (HPCC-2012), or the associated workshops are invited to submit their extended and revised papers to this special issue. Each journal paper has to extend the conference version by containing at least 30% new material.

Theme and Topics

The past decade has witnessed a proliferation of powerful parallel and distributed systems and an ever-increasing demand for practice of high performance computing systems, due to the rapid growth in computing and communications technology. High performance computing systems has moved into the mainstream of computing research and development 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. This special issue aims to present and discuss advances of current research and development in all aspects of high performance computing architectures and systems.

Topics of particular interests include the following, but are not limited to:

- High-performance scientific and engineering computing
- Parallel and distributed systems and architectures
- Parallel and distributed algorithms
- Cloud computing
- Web services and Internet computing
- Grid and cluster computing
- Wireless and wired communications
- Pervasive/ubiquitous computing and intelligence
- Peer-to-peer computing
- Performance evaluation and measurement
- Database systems and applications
- Autonomic, reliability and fault-tolerance

- Trust, security and privacy
- Biological/molecular computing

Submission Details

Original, high quality contributions that are not yet published or that are not currently under review by other journals or peer-reviewed conferences are sought. The Guide for authors can be found at http://www.journals.elsevier.com/journal-of-computer-and-system-sciences/. Authors should submit papers as PDF files in email addressed to the corresponding Guest Editor, huj@hope.ac.uk, and cc to Managing Editor, blum@usc.edu. To ensure that all manuscripts are correctly identified for consideration by the Special Issue, authors should include "Special Issue Submission: HPCC-2012" in the title of the email. They should also specify the manuscript as a submission to the "Special Issue on High Performance Computing Architectures and Systems" in the cover letter. For further questions or inquiries, please contact the corresponding Guest Editor Dr. Jia Hu.

Important Dates

Submission Due Date: Jan. 31, 2013

First-Round Review Notification: Mar. 31, 2013

Revision Due Date: April 30, 2013

Final Decision Date: May 31, 2013

Guest Editors

Jia Hu, Department of Computer Science, Liverpool Hope University, UK
huj@hope.ac.uk (Corresponding Guest Editor)

Seetharami Seelam, IBM Thomas J. Watson Research Center, USA

Laurent Lefevre, INRIA, University of Lyon, France

Xiaowen Chu, Hong Kong Baptist University, Hong Kong