Call for Papers

Cluster Computing, Springer

Special Issue on Advanced Grid and Pervasive Computing and its Applications

Theme and Scope

This issue covers research issues and challenges in the field of computer science and engineering in areas of grid and pervasive computing. Grid computing is about large scale distributed computation, large scale data and large scale collaborations - applied to solving large scale problems. It is the enabling infrastructure for exciting new developments across various subject domains including science, engineering and medicine. Grid computing enables us to tackle problems by bringing together distributed resources, to be used cooperatively to solve problems which may require an enormous amount of computing power.

Pervasive computing is about distributed computing devices in the physical world, such as personal devices, wearable computers, devices embedded in everyday objects and sensors in the environment - it is about both the devices and the infrastructures needed to support pervasive computing applications. Both Grid and Pervasive computing share many computer science research challenges, requiring coordinated behavior within large scale distributed systems.

The goal of this issue is to discover a new progressive technology by upgrading the previous technologies and to solve the technical problems that may have occurred in the process of converging technology in grid and pervasive computing. The papers will be peer reviewed and will be selected on the basis of their quality and relevance to the theme of this special issue. Papers on practical as well as on theoretical topics and problems are invited. The best high-quality papers will be only selected.

Topics of interest include, but are not limited to:

- Creation and management of virtual enterprises and organizations
- Grid and cloud computing economy and business models
- Grid and pervasive applications, including eScience and eBusiness applications
- Multi-core and cluster computing
- Cloud, cluster and grid computing
- Virtualization techniques, tools, and applications
- Distributed multimedia analysis and processing
- Middleware, resource management, and runtime environments
- Programming models, tools and environments for distributed and pervasive computing
- Semantic web, semantic grid, metadata and ontology related to pervasive and distributed computing
- Parallel programming models and languages
- Parallel language compiler and run-time support
- Parallel and distributed systems
- Performance modeling, prediction, and tuning
- Security and privacy in grid, pervasive and cloud computing
- Mobile, peer-to-peer and pervasive computing

Instructions for Manuscripts

Submitted papers should be submitted via Cluster Computing’s online submission system at http://www.editorialmanager.com/clus/.

All submitted papers will be peer reviewed according to the usual standards of this journal, and will be evaluated on the basis of originality, quality and relevance to this Special Issue and the journal, and on the basis of clarity and correct use of English.

The submitted papers should be formatted according to the journal style. For more detailed information concerning the requirements for submission, please refer to the journal homepage at: http://www.editorialmanager.com/clus/

Important Dates

- Manuscript submission deadline: July 30, 2013
- Revised paper due: Nov. 30, 2013
- Final paper submission deadline: Dec. 30, 2013
- Publication Date: 2nd / 3rd Quarter, 2014 (Tentative)

Guest Editors

Prof. Changhoon Lee
(Corresponding Editor)
SeoulTech, Korea
Email: changhoonlee08@gmail.com

Prof. Weisong Shi
Wayne State University, USA
Email: weisong@wayne.edu

Prof. George Roussos
University of London, UK
Email: g.roussos@bbk.ac.uk