Cyber-enabled distributed computing enables ubiquitous services and knowledge discovery. From a computer or mobile device, a user simply submits its service request to the service provider with the connection of the Internet or wireless networks. The result of the requested service is delivered back to the user in a timely manner, while the information storage and process, interoperating protocols, service composition, communications, and distributed computation are all smoothly coordinated by the network, without the involvement of the user. Consequently, the service complexity is hidden from the user, offering desirable performance. However, there are a number of challenges for ubiquitous services and knowledge discovery due to the increases of users and services. The user accessing networks (e.g., LTE) and IP core backbone (e.g., the Internet) need innovative approaches to ensure reliable information exchanges with broadband connectivity. The connectivity should be Quality of Service (QoS) enabled with the ability of exploiting the network and application contexts to meet users’ requirements in various aspects. The infrastructure in the network should be carefully designed to offer various capabilities for distributed computing. It is still an open issue to seamlessly deploy eScience infrastructure and process immerge data sets in a highly distributed environments to meet the diverse application requirements. Grid allows loosely coupled, heterogeneous, and geographically dispersed computers to act together for performing a very large number of tasks. Cloud computing enables shared servers to provide resources, software, and data for collaborative services on demand with high interoperability, scalability, efficiency, simplicity, and security. All of these issues deserve attention from researchers.

This FGCS special issue for CyberC 2011 is to promote novel research on Grid, Distributed, and Cloud Computing and EScience, toward Cyber-enabled distributed computing for ubiquitous services and knowledge discovery. A full list of relevant topics can be found in the conference website: www.CyberC.org and some of them are:

- Clusters and data centralized storage
- Autonomic, Real-Time and Self-Organizing Grids
- Architectural models for cloud computing
- Cloud resource management and allocation
- Utility models and service pricing
- New parallel / concurrent programming models for cloud computing
- Scientific computation and other applications in the cloud
- Workflows for cloud computing
- Content Delivery Networks using Storage Clouds
- EScience and Grid applications
- EScience workflow management
- Web semantics for EScience
- Ontologies and databases for EScience
• Data and process provenance
• Parallel and distributed data mining algorithms
• Resource allocation, load-balance, and management in distributed computing
• SOA, Web services, and mobile services
• Web-caching, content delivery systems and data distribution systems
• Web services and internet computing
• Distributed systems and applications, modeling language, and software engineering for distributed applications
• Mobile computing and networking theory and algorithms
• Future generation communications for 4G or beyond (WiMAX, LTE)

**Paper Submission:**
The full paper can be submitted via [http://ees.elsevier.com/fgcs/](http://ees.elsevier.com/fgcs/). In addition, a short version (up to 8 pages) HAS TO be submitted from EDAS online system of [http://edas.info/](http://edas.info/), by selecting “CyberC 2011”. The full version should be extended by 30% at least, compared to its CyberC 2011 conference version. The guideline for FGCS can be found at [http://ees.elsevier.com/fgcs/](http://ees.elsevier.com/fgcs/) and that for CyberC 2011 can be found at [www.CyberC.org](http://www.CyberC.org). If you have troubles in submission, please contact us. High quality CyberC 2011 papers without FGCS submission can be also recommended for FGCS. Based on the initial recommendation from the conference paper review, the final evaluation will be based on the *Camera-ready* version of the papers from the aspects of scientific novelty, contributions, correctness, theoretical analysis, simulation or experimental results, quality of presentation, and relevance to the FGCS Special Issue. The authors for FGCS have to register and present the work in the conference.

**Important Days**

- June 15, 2011 - Manuscript
- August 15, 2011 - Notifications to Authors (CyberC conference paper will be notified separately)
- October 1, 2011 - Revised Manuscript Submission
- November 1, 2011 - Final Decision
- December 15, 2011 - Camera Ready Papers

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