Concurrency and Computation: Practice and Experience

Special Issue on
Multimedia Computing and Management in Cloud Environment

Introduction
Cloud computing is attracting more and more researchers, which moves most heavy tasks from clients to servers. Generally, the cloud servers can be managed in order to implement various tasks requested by clients, while clients' terminals may be very lightweight in energy cost or computational complexity. Especially, with the terminal containing only the explorer, clients can consume various services. Software-as-a-service (SaaS) is the typical application that requests users to run the software in cloud servers instead of downloading it. Thus, it saves the cost of transmitting or storing multiple software copies. Cloud computing has been used in Internet-based systems, and is being extended to telecommunication systems.

In cloud computing environment, various innovative multimedia (text, image, audio, video, graph, etc.) services appear. For example, users may work on one document or drawing together over Internet, users can push their complicated computing tasks to cloud servers, and users can forward their multimedia content (e.g., TV program) to cloud servers with the aim of obtaining the analyzed result (e.g., a short summarization). To support these services, various computing or management techniques are required, e.g., multimedia processing, coding, communication, storage and access. Additionally, in cloud computing, security and privacy become very important issues, e.g., user authentication and authorization, information exchange between clients and cloud servers, privacy protection of user-uploaded content, etc.

This special issue aims to collect the best papers contributed by leading experts, and expose the readership to the latest research results on multimedia computing and management in cloud computing environment. It will include a number of related topics, demonstrate pioneer work, investigate the novel solutions and discuss the future trends in this field.

Topics
Submitted papers may focus on theoretical model, architecture construction, algorithm design or hardware implementation. Both review papers and technical papers are expected. The topics include but are not limited to
Resource allocation in cloud computing
Task management in cloud computing
Cloud computing platform and system
Multimedia coding for cloud based applications
Multimedia processing in cloud environment
Multimedia communication in cloud environment
Multimedia content management in cloud environment
Multimedia storage and access in cloud platforms
Multimedia service and system in cloud environment
Multimedia security and protection in cloud computing
User authentication/authorization in cloud computing
Secure communication in cloud computing
Copyright protection and tracing in cloud computing
Privacy preservation in cloud computing

Submission
The submitted papers should describe original research which is not published nor currently under review by other journals or conferences.

Besides normal submissions, the selected best papers of the following conferences are invited to this special issue:

There should be at least 40% differences between the extended/revised paper and conference paper.

Author guidelines for preparation of manuscript can be found at http://www3.interscience.wiley.com/journal/117946197/grouphome/home.html. All manuscripts and any supplementary material should be submitted through the online submission system: http://www3.interscience.wiley.com/journal/117946197/grouphome/home.html. All papers will be rigorously reviewed based on their originality, high scientific quality, organization, clarity of writing, and support provided for assertions and conclusion.

Important Dates
Submission deadline: December 25, 2010
First revision notification: April 1, 2011
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Short biographies of guest editors
Shiguo Lian got his Ph.D. from Nanjing University of Science and Technology, China. He was a research assistant in City University of Hong Kong in 2004. He has been Research...
Scientist with France Telecom R&D (Orange Labs) Beijing since 2005. He authors or co-authors more than 80 refereed international journal/conference papers and 14 filed patents. He has authored and edited 5 books. His research interests include intelligent multimedia analysis and services, ubiquitous computing and communication, information and communication security. He got the Nomination Prize of "Innovation Prize in France Telecom", and he got "Top 100 Doctorate Dissertation in Jiangsu Province" in 2006. He has edited 8 special issues for international journals. He is the TPC members of IEEE ICC2008/2009/2010, IEEE GLOBECOM2008/2010, IEEE CCNC2009/2010, IWDW2008, etc., and invited reviewers of famous journals, e.g., IEEE Communications Magazine, IEEE Transactions on Image Processing, IEEE Transactions on Circuits and Systems I/II, Computer Communications, Multimedia Tools and Applications, Chinese Journal of Electronics, etc. For some of his publications, please see http://www.informatik.uni-trier.de/~ley/db/indices/a-tree/l/Lian:Shiguo.html.

Athanasios V. Vasilakos is currently a Professor with the Department of Computer and Telecommunications Engineering, University of Western Macedonia, Kozani, Greece, and a Visiting Professor with the Graduate Program of the Department of Electrical and Computer Engineering, National Technical University of Athens (NTUA), Athens, Greece. He has authored or coauthored over 200 technical papers in major international journals and conferences. He is author/coauthor of five books and 20 book chapters in the areas of communications. Prof. Vasilakos has served as General Chair, Technical Program Committee Chair, and symposium Chair for many international conferences. He is Chairman of the Intelligent Systems Applications Technical Committee (ISATC) of the IEEE Computational Intelligence Society (CIS). He served or is serving as an Editor or Guest Editor for many technical journals, such as the IEEE TRANSACTIONS ON SYSTEMS, MAN, AND CYBERNETICS—PART B: CYBERNETICS, the IEEE TRANSACTIONS ON INFORMATION TECHNOLOGY IN BIOMEDICINE, the IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, the IEEE Communications Magazine, and the ACM Transactions on Autonomous and Adaptive Systems. He is founding Editor-in-Chief of the International Journal of Adaptive and Autonomous Communications Systems (IJAACS, http://www.inderscience.com/ijaacs) and the International Journal of Arts and Technology (IJART, http://www.inderscience.com/iheart).