

Special Issue Proposal

Title: "Special Issue: Advance on Intelligent Grid and Cloud Computing" on Information Systems Frontier

Guest editor:

Prof. Jason J. Jung (Yeungnam University, Korea)

Prof. Yue-Shan Chang (National Taipei University, Taiwan)

Prof. Ying Liu (Hong Kong polytech. Univ., Hong Kong)

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Motivation and Target Audience

Grid and cloud computing have been one of most popular research topics in recent year. These technologies are very important since various resources are geographically distributed and heterogeneous. Users can transparently access the resources/services without taking care about how many services the platform has and where the services will be located. Cloud computing can be seen as a natural next step from the grid-utility model. Some advanced technologies and issues are necessary to be investigated, such as platform, hybrid cloud architecture, service discovery and intelligent management, workflow, QoS issue, green issue, cost-model, and so on, to provide transparent, secure, and efficient service access behind the platform. In addition, a well-defined model and effective economics are useful for coordinating services/resources scattered world-wide. A variety of valuable achievements and implementation experiences will drive sustained development and success in the topic.

This special issue aims to foster state-of-the-art research in the area of grid and cloud computing and is expected to focus on all aspects of cloud technologies and to present novel results and solutions to solve the various problems and challenges in grid and cloud platforms. The target audience of this special issue includes academics, researchers, engineers, professionals working on the relevant topics in design profession, manufacturing engineering, industrial engineering, computer science, information system, and the graduate students who wish to learn and spot potential research opportunities.

Subject Coverage

We encourage the submission of innovative and mature results in designing, analyzing, and developing advanced technology, services, and applications of grid and cloud computing. Areas of interest include, but are not limited to, the following topics:

- Middleware and tools of Grid/Cloud computing
- Programming and components models of Grid/Cloud Computing
- Platform and Applications of Grid/Cloud Computing
- Intelligent Management of Grid/Cloud
- Hybrid Cloud Architecture
- Workflow of Hybrid Cloud
- Green issue of Grid/Cloud Computing
- Mobile and Pervasive computing
- Cost-Model of Grid/Cloud Computing
- QoS Issue on Grid/Cloud Computing
- Security Issue on Grid/Cloud Computing
- Information/knowledge Cloud

Tentative Schedule

- Submission of full papers: 15 Jan. 2011
- First round review completed and notification: 15 March 2011
- Submission of revised papers: 15 April 2011
- Second round review completed and notification: 15 May 2011
- Submission of final version of the paper: 30 May 2011
- Final decision notification: 15 June 2011
- Estimated publication date: Early 2012

Best Papers Selected from Conference

Besides normal submissions, the revised version of the best papers selected from the 2010 International Workshop on Intelligent Grid and Cloud Computing (IGCC2010) co-located with EUC 2010 (<http://www.euc2010.org/>) will be invited to this special issue. The revised version must have at least 40% difference from the conference paper.

Review Process

Papers will be evaluated on their merits, relevance to industry, contribution to the grid/cloud computing field, suitability to the special issue, and overall quality. All papers will be rigorously refereed by 3 reviewers from the following reviewer board. Submission of a manuscript to this special issue implies that no similar paper is already accepted or will be submitted to any other conference or journal.

Dr. Gonzalo A. Aranda-Corral (Universidad de Sevilla, Spain)

Dr. Cecile Bothorel (France Telecom R&D, France)

Dr. Longbing Cao (UTS, Australia)
Prof. Emilio Corchado (University of Burgos, Spain)
Prof. Oscar Cordon (University of Granada, Spain)
Prof. Fred Freitas (Universidade Federal de Pernambuco, Brazil)
Prof. Daniela Godoy (Unicen University, Argentina)
Prof. Jennifer Golbeck (University of Maryland, USA)
Dr. Adam Jatowt (Kyoto University, Japan)
Prof. Geun-Sik Jo (Inha University, Korea)
Prof. Krzysztof Juszczyszyn (Wroclaw University of Technology, Poland)
Prof. Hong-Gee Kim (Seoul National University, Korea)
Prof. Dariusz Krol (Wroclaw University of Technology, Poland)
Prof. Monika Lanzemberger (Vienna University of Technology, Austria)
Dr. Peter Mika (Yahoo Research, Spain)
Prof. Michal Lower (Wroclaw University of Technology, Poland)
Prof. Ngoc Thanh Nguyen (Wroclaw University of Technology, Poland)
Dr. Heiko Stoermer (University of Trento, Italy)
Prof. Iwan Tabakow (Wroclaw University of Technology, Poland)
Dr. Anna Fensel (FTW, Austria)

Short bio(s) of the Special Issue guest editor(s).

Dr. Jason J. Jung is currently an assistant professor of Computer Engineering Department at Yeungnam University, Korea. He was a postdoctoral researcher in INRIA Rhone-Alpes, France in 2006, and a visiting scientist in Fraunhofer Institute (FIRST) in Berlin, Germany in 2004. He received the B.Eng. in Computer Science and Mechanical Engineering from Inha University in 1999. He received M.S. and Ph.D. degrees in Computer and Information Engineering from Inha University in 2002 and 2005, respectively. His research topics are knowledge engineering on social networks by using machine learning, semantic Web mining, and ambient intelligence. He has about 20 international journal articles published in Knowledge-Based Systems, Information Retrieval, Information Processing & Management, Knowledge and Information Systems, and Expert Systems with Applications. Also, he is one of the editorial member of Journal of Universal Computer Science.

Dr. Yue-Shan Chang received his PhD Degree from Computer and Information Science at the National Chiao Tung University in 2001. He joined the Department of Electronic Engineering of the Ming Hsing University of Science and Technology in August 1992. Since August 2001, he had been an Associate Professor. Since August

2004, he joined the Department of Computer Science and Information Engineering, National Taipei University, Taipei County, Taiwan. His research interests are in distributed systems, object oriented programming, information retrieval and integration, mobile computing and grid computing. Dr. Chang has published around 60 scientific papers in refereed journals and conferences. He serves as the guest editor of International Journal of Ad Hoc and Ubiquitous Computing, 2009. He has also served as PC member for a number of conferences, eg. ICA3PP 2010, GridCat2009, 2C-Com 09, HPC Asia conference 2009, etc.

Dr. Ying Liu is presently an Assistant Professor with the Department of Industrial and Systems Engineering at the Hong Kong Polytechnic University. He obtained his Bachelor and Master from Chongqing University in 1998 and 2001 respectively, and M.Sc. and Ph.D. from the Singapore MIT Alliance (SMA) at the Nanyang Technological University and the National University of Singapore in 2002 and 2006 respectively. His current research interests focus on design informatics, data mining and text mining, intelligent information processing and management, machine learning, and their joint research and applications in engineering design, manufacturing and medical and healthcare industry for knowledge discovery and management purpose. He has been Guest Editor with Journal of Intelligent Manufacturing, Advanced Engineering Informatics, Information Systems Frontier, etc. He is a member with ACM, IEEE, ASME and the international Design Society.

Dr. Chao-Chin Wu is currently an Associate Professor and Chair of Department of Computer Science and Information Engineering, National Changhua University of Education, Taiwan. He received the B.S. degree in Computer Science and engineering from Tatung Institute of Technology, Taiwan, in 1990, and the M.S. and Ph.D. degrees in Computer Science and Information Engineering from National Chiao Tung University, Taiwan, in 1992 and 1998, respectively. He was Director of Computer Center, National Changhua University of Education, Taiwan from 2005 to 2007. His research interests are in parallel and distributed computing, cloud computing, grid computing, and intelligent systems. He has served as Program Vice Chair for FCST 2009, Publicity Chair for GridCAT 2009, and PC Member for a number of conferences, e.g., IMNE 2010, MAC 2010, 2C-Com 2009, HPC Asia 2009, CSE 2008, etc. He is a member of the IEEE Society.

Previous Special Issues edited by Guest editors

1. Jason J. Jung, Chulmo Koo, Kichan Nam, "Service science," to appear in Journal of Universal Computer Science, to appear, 2010.
2. Jason J. Jung, Ngoc Thanh Nguyen, "Virtual Agent and Organization Modeling: Theory and Applications," to appear in Information Sciences, to appear, 2010.
3. Jason J. Jung, "Collective Intelligence for Multimedia Tools and Applications," to appear in Journal of Universal Computer Science, to appear, 2010.
4. Jason J. Jung, "Collective Intelligence on Semantic Web," Computing and Informatics, Vol. 28, No. 4, 2009.
5. Jason J. Jung, Krzysztof Juszczyszyn, "Editorial: Knowledge Dynamics in Semantic Web and Social Network," International Journal of Intelligent Information and Database Systems, Vol. 1, No. 3, pp. 245-246, 2007.
6. Yue-Shan Chang, Chao-Tung Yang, Cho-Li Wang, Shyan-Ming Yuan "Grid & Cloud Computing", International Journal of Ad Hoc and Ubiquitous Computing (SCIE), to appear 2010,
7. Jason J. Jung, Yue-Shan Chang, Zhiwen Yu, Advances on Intelligent Network Management"to appear 2011, Telecommunication Systems.