

CMPP 2011 Call for Papers



The First International Workshop on Challenges on Massively Parallel Processors

to be held in conjunction with ICNC'11

<http://www.icnc.info/>

Osaka, Japan, November 30-December 2, 2011

Workshop summary:

Implemented multiple processor cores on an integrated silicon die, a new Moore's law has been developed and has become popular in the industrial market, called massively parallel environment. It is generally referred as manycore/multicore processors such as the efforts to Multicore CPUs from Intel and AMD, GPUs from NVIDIA and ATI and CELL from IBM, for instance. This workshop, CMPP will focus on dissemination opportunities for researchers from over the world to present advanced technologies and research results. Moreover, the eager discussion will be expected in the congress to exchange the opinions to promote the future technologies for massively parallel processors.

Scope:

Authors are invited to submit manuscripts that present original unpublished research, including the development of experimental or commercial systems. Work focusing on emerging technologies is especially welcome. Topics of interest include, but are not limited to:

- Challenges for GPU Computing
 - ✧ Performance analysis and algorithm for applications from various areas
 - ✧ Supercomputing on GPU clusters
 - ✧ Novel techniques on performance acceleration for GPU computing
 - ✧ Compiler techniques and instruction scheduling for performance improvement
- Challenges for architectures of massively parallel systems
 - ✧ Future system design
 - ✧ Massively parallel system on FPGA/LSI
- Challenges for novel models and algorithms targeted to manycore/multicore systems
 - ✧ Modeling and algorithms from various areas on massively parallel environment
 - ✧ Stream computing
 - ✧ Performance acceleration models for future performance demands
 - ✧ Load balancing and task scheduling on massively parallel environment
- Challenges for applications
 - ✧ Algorithms and practical performance analysis for industrial/numerical/scientific applications

Submission Instruction:

Prospective authors are encouraged to submit an electronic version of an original, unpublished manuscript in PDF using EasyChair by July 18, 2011. If you do not have an EasyChair account, you must create it first. Submissions should include abstract, keywords, the e-mail address of the corresponding author, and must be from 5 to 7 pages using IEEE Manuscript Templates for Conference Proceedings. Submissions imply the willingness of at least one author to register, attend the workshop, and present the paper. Accepted and presented papers will be published by Conference Publishing Service and archived to IEEE Xplore and CSDL digital libraries. Also they are arranged for indexing through INSPEC, EI (Compendex), Thomson ISI, and other indexing services.

Important Dates:

Submission: **Extended to August 3**, 2011

Notification of paper acceptance: August 20, 2011

Submission of camera-ready papers: September 9, 2011

Special Issue on Journal:

The selections of the accepted papers on the workshop will be invited for publication at a special issue on International Journal of Networking and Computing (<http://ijnc.org/>).

Special Tutorial Session:

We will organize a special tutorial session as a part of ICNC. Preliminary titles are listed below:

- "TSUBAME2.0: A Petascale GPU-accelerated Supercomputer"
 - ✧ by Prof. Toshio Endo (Tokyo Institute of Technology, Japan)
- "All about RICC: RIKEN Integrated Cluster of Clusters"
 - ✧ by Dr. Maho Nakata (RIKEN, Japan)
- "Invitation to OpenCL"
 - ✧ by Mr. Pablo Lamilla Alvarez (Kochi University of Technology, Japan)

Organizers:

Workshop co-chairs:

Shinichi Yamagiwa (Kochi University of Technology / JST PRESTO, Japan)
Koji Nakano (Hiroshima University, Japan)

Program Committees:

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