CALL FOR PAPER

The 9th International Workshop on Parallel and Distributed Scientific and Engineering Computing (PDSEC-08)

April 14-18, 2008, Miami, Florida USA

to be held in conjunction with IPDPS 2008

Scope and Interests: The field of high performance computing has earned prominence through advances in electronic and integrated technologies beginning in the 1940s. Current times are very exciting and the years to come will witness a proliferation in the use of parallel and distributed systems. The scientific and engineering application domains have a key role in shaping future research and development activities in academia and industry, especially when the solution of large and complex problems must cope with tight timing schedules.
This special workshop is to bring together computer scientists, applied mathematicians and researchers to present, discuss and exchange ideas, results, work in progress and experiences in the area of parallel and distributed computing for problems in science and engineering applications and inter-disciplinary applications.

Among the main topics of interest (but not limited to) are:

- development of advanced parallel and distributed methods,
- parallel and distributed computing techniques and codes,
- practical experiences using various parallel and distributed systems with software such as MPI, PVM, HPFortran, OpenMP, UPC, mpC etc.,
- domain decomposition,
- loop and task parallelism,
- scheduling and load balancing,
- compiler, hardware and OS issues for scientific and engineering computing,
- memory system and I/O supports for scientific and engineering computing,
- Hardware/software support for performance, power and energy-ware applications,
- Network, Mobile/wireless processing and computing,
- performance modeling and evaluation of scientific and engineering computing,
- cluster and grid scientific and engineering computing,
- biologically inspired algorithms in system model, design and applications.
- Applications to the following areas, but not limited to:
  - computational fluid dynamics and mechanics
  - material sciences
  - space, weather, climate systems and global changes
  - computational environment and energy systems
  - computational ocean and earth sciences
  - combustion system simulation
  - computational chemistry
  - computational physics
  - bioinformatics and computational biology
  - medical applications
  - transportation systems simulations
  - combinatorial and global optimization problems
  - structural engineering
  - computational electro-magnetic
  - computer graphics
  - virtual reality and multimedia
  - semiconductor technology, and electronic circuits and system design
  - dynamic systems
  - computational finance
  - data mining
  - signal and image processing

Submission Information: Authors are expected to submit a paper of at most 20 pages in either PS or PDF format with 5-10 keywords. The submission is via an online submission system, see the workshop website for details. Program Committee members and external reviewers will provide at least three reviews to the authors. Papers will be ranked for relevance to the workshop and technical merit. Accepted papers with at most 8 pages will be published by IEEE Computer Society Press as IPDPS-08 proceedings. Selected best papers will be considered for a special issue of an international journal.

Further information about the conference can be found at:

http://cse.stfx.ca/∼ltyang/ipdps08-pdsec/

Important Deadlines:

Paper submission Due ..... December 08, 2007
Notification of Acceptance ..... January 12, 2008
Final camera-ready paper ..... January 28, 2008

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