



May 31 – June 2, 2010

International Conference on Computational Science

Workshop

Tools for Program Development and Analysis in Computational Science

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The use of supercomputing technology, parallel and distributed processing, and sophisticated algorithms is of major importance for computational scientists. Yet, the scientists' goals are to solve their challenging scientific problems, not the software engineering tasks associated with it. For that reason, computational science and engineering must be able to rely on dedicated support from program development and analysis tools.

The primary intention of this workshop is to bring together developers of tools for scientific computing and their potential users. Paper submissions by both tool developers and users from the scientific and engineering community are encouraged in order to inspire communication between both groups. Tool developers can present to users how their tools support scientists and engineers during program development and analysis. Tool users are invited to report their experiences employing such tools, especially highlighting the benefits and possible improvements.

The following areas and related topics are of interest:

- Problem solving environments for specific application domains
- Application building and software construction tools
- Domain-specific analysis tools
- Program visualization and visual programming tools
- On-line monitoring and computational steering tools
- Requirements for (new) tools emerging from the application domain

In addition, we encourage software tool developers to describe use cases and practical experiences of software tools for real-world applications in the following areas:

- Tools for parallel, distributed, and network-based computing
- Testing and debugging tools
- Performance analysis and tuning tools
- (Dynamic) Instrumentation and monitoring tools
- Data (re-)partitioning and load-balancing tools
- Checkpointing and restart tools
- Tools for resource management, job queuing, and accounting

Call for Papers

We invite you to submit a paper
of up to 10 pages via the
conference submission system.

Please format the paper
according to the rules of
Procedia Computer Science.

Contact & Information

<http://www.lrz.de/iccs2010/>

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Papers due
December 20, 2009

Author notification
February 15, 2010

Camera ready papers due
March 1, 2010