Joint Workshop at ICCS 2009

Tools for Program Development and Analysis in Computational Science

and

Software Engineering for Large-Scale Computing

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The regular use of supercomputing technology, parallel and distributed processing, and sophisticated algorithms is of major importance for computational scientists. Yet, the true goals of scientists are to solve their challenging scientific problems, therefore they must be able to rely on dedicated support from program development and analysis tools.

Furthermore the workshop targets the software engineering process for distributed and parallel applications. This includes all steps from planning, management, verification and validation to software testing and quality measurement. It addresses the specific requirements of scientific and research applications as well as production and industry-level users.

The topics of interest related to distributed and parallel computing include:

• Software development tools
• Testing and debugging
• Program analysis and visualization
• Performance analysis and tuning
• Software development processes
• Management of large amounts of data and data mining
• Resource management, load balancing, job queuing and accounting
• Problem solving environments for specific application domains
• Use cases and practical experiences with real-world applications

In the joint workshop will bring together researchers and practitioners from computational science and software engineering backgrounds as well as tool developers and the (potential) users to exchange their experiences.

URL: http://wwwpub.zih.tu-dresden.de/~knuepfe/iccs/2009/

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