



April 14 – 15, 2008
Miami, Florida, USA
<http://www.ece.lsu.edu/vaidy/raw08>

Call for Papers



The 15th Reconfigurable Architectures Workshop (RAW 2008) will be held in Miami, Florida in April 2008. RAW 2008 is associated with the 22nd Annual International Parallel & Distributed Processing Symposium (IPDPS 2008) and is sponsored by the IEEE Computers Society's Technical Committee on Parallel Processing. The workshop is one of the major meetings for researchers to present ideas, results, and on-going research on both theoretical and practical advances in Reconfigurable Computing.

Run-Time Reconfiguration & Adaptive Computing: Architectures, Algorithms, Technologies

Run-Time and Dynamic Reconfiguration are characterized by the ability of underlying hardware architectures or devices to rapidly alter (on the fly) the functionalities of its components and the interconnection between them to suit the problem. Key to this ability is reconfiguration handling and speed. Though theoretical models and algorithms for them have established reconfiguration as a very powerful computing paradigm, practical considerations make these models difficult to realize. On the other hand, commercially available devices (such as FPGAs and new coarse-/multi-grain devices) appear to have more room for exploiting run-time reconfiguration (RTR). An appropriate mix of the theoretical foundations of dynamic reconfiguration, and practical considerations, including architectures, technologies and tools supporting RTR is essential to fully reveal and exploit the possibilities created by this powerful computing paradigm. RAW 2008 aims to provide a forum for creative and productive interaction between all these disciplines.

Topics of Interest

Authors are invited to submit manuscripts of original unpublished research in all areas of dynamic and run-time reconfiguration (foundations, algorithms, hardware architectures, devices, systems-on-chip (SoC), technologies, software tools, and applications). The topics of interest include, but are not limited to:

Models & Architectures

- Theoretical Interconnect and Computation Models
- RTR Models and Systems
- RTR Hardware Architectures
- Optical Interconnect Models
- Simulation and Prototyping
- Bounds and Complexity Issues

Algorithms & Applications

- Algorithmic Techniques
- Mapping Parallel Algorithms
- Distributed Systems & Networks
- Fault Tolerance Issues
- Wireless and Mobile Systems
- Automotive Applications
- Infotainment & Multimedia
- Biology Inspired Applications

Design, Technologies & Tools

- Configurable Systems-on-Chip
- Energy Efficiency Issues
- Devices and Circuits
- Reconfiguration Techniques
- High Level Design Methods
- System Support
- Adaptive Runtime Systems
- Organic Computing

Submission Guidelines:

Authors should submit and register their paper through our web-interface which will be announced on the web-page: <http://www.ece.lsu.edu/vaidy/raw08> by October 08, 2007. (Webinterface will be accessible after Sept. 1st, 2007)

All manuscripts will be reviewed by at least three members of the program committee. Submissions should be a complete manuscript (not to exceed 8 pages of single spaced text, including figures and tables) or, in special cases, may be a summary of relevant work. Submissions should be in pdf-format (preferred), or alternatively in Postscript (level 2) format. Authors should make sure that the submission can be viewed using ghostscript and will print on standard letter size paper (8.5" x 11").

IEEE CS Press will publish the IPDPS symposium and workshop abstracts as a printed volume. The complete symposium and workshop proceedings will also be published by IEEE CS Press as a CD-ROM disk.

Important Dates:

Manuscript due: October 15, 2007
Notification of acceptance: December 11, 2007
Camera-ready Papers Due: January 28, 2008

Organization:

Workshop Co Chairs: Jürgen Becker, Universität Karlsruhe (TH), Germany
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Program Committee:

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