ARC'2007 International Workshop on Applied Reconfigurable Computing

http://www.arc-workshop.org/arc2007

Call for Papers

Mangaratiba, Rio de Janeiro, Brazil, March 27-29, 2007

Meeting Venue

The workshop will be held at the **Portobello Hotel** in Mangaratiba, Rio de Janeiro, Brazil, on March 27-29, 2007. Mangaratiba is located approx. 90 Km (56 miles) from downtown Rio de Janeiro.

The event is organized by the Instituto de Ciências Matemáticas e de Computação (ICMC), Universidade de São Paulo, Brazil.

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Walid Najjar, University of California Riverside, USA
Wayne Luk, Imperial College, UK

Applied Reconfigurable Computing

Reconfigurable computing technologies offer the promise of substantial performance gains over traditional architectures via the customizing, even at runtime, the topology of the underlying architecture to match the specific needs of a given application. Contemporary configurable architectures allow for the definition of architectures with functional and storage units that match in function, bit-width and control structures the specific needs of a given computation. The flexibility enabled by reconfiguration is also seen as a basic technique for overcoming transient failures in emerging device structures.

ARC aims at bringing together researchers and practitioners of reconfigurable computing with an emphasis on practical applications of this promising technology. This year's workshop will have a series of international invited speakers that will express their view on the future of reconfigurable technology.

Workshop Themes

Topics of Interest

Submissions are solicited on a wide variety of topics related to applied reconfigurable computing, including but not limited to:

- Methods and Tools (High-Level Compilers, Simulation, Estimation, Design space exploration, Languages to program reconfigurable systems, etc.)
- Architectures (Fine-grained, coarse-grained, and mixed-grained, Multi-processor-based reconfigurable platforms, Microprocessors with tightly-coupled reconfigurable hardware, etc.)
- Applications (High-Performance Systems, use of reconfigurable computing in embedded systems, robotics, digital signal processing, etc.)
- Teaching reconfigurable computing
- Surveys and Future Trends
- Benchmarks (papers presenting benchmarks publicly available to be used by the reconfigurable computing community are especially welcome)

Submission Information

Authors are invited to submit original contributions in English including, but not limited to, the areas of interest mentioned above. Papers should be submitted electronically in PDF format following the LNCS formating guidelines (see **http://www.springer.de/comp/lncs/authors.html**).

Submissions must identify the format of the contribution as either, **long papers**, 12 pages maximum and which should include mainly accomplished results, or as **short papers** (6 pages maximum to be composed of work in progress or report recent developments. The paper submission website is located at **http://conferenceserver.rnl.ist.utl.pt/conftool** which can also be accessed via the ARC 2007 website indicated above. Each paper will be reviewed by at least three program committee members. In order to maintain a blind review information about authors should not be included in the submission.

Important Dates

Submission deadline: November 20, 2006

Author Notification: December 22, 2006

Camera-Ready deadline: January 8, 2007

Registration: December 29, 2006

Workshop: 27-29, March, 2007

For more information:
arc2007@icmc.usp.br

Proceedings Publication

As with the 2006 ARC edition, it is planned to publish the proceedings of this year's workshop as a **Springer Verlag LNCS series volume**. The best papers will be invited to submission to a special issue of the **International Journal of Electronics** (Taylor & Francis Group) dedicated to ARC 2007. Please use the LaTex instructions file LLNCS.zipfile located at **http://www.springer.com/sgw/cda/frontpage/0,11855,5-164-2-72376-0,00.html**.

Satellite Event

RMRC - Regional Meeting on Reconfigurable Computing (www.icmc.usp.br/~lcr/rmrc2007)
Mangaratiba, Rio de Janeiro, Brazil, March 26, 2007