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SPECIAL SESSION PROGRAM

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SPECIAL SESSION ON MONITORING AND RECONFIGURATION OF PARALLEL SYSTEMS (MoRPS)

Systems need to be able to reconfigure themselves dynamically by monitoring their own condition and the surrounding environment in order to adapt themselves to different scenarios and requirements. Runtime monitoring becomes crucial in the emerging and future parallel and distributed systems due to increase in variations and fault occurrences as well as due to the need for various dynamic optimizations. Furthermore, to obtain optimal performance-power ratio, for both single-chip and physically distributed parallel systems, monitoring and reconfiguration are essential to have system wide adaptability.

SPECIAL SESSION SCOPE

This special session addresses all aspects of monitoring and reconfiguration of parallel and distributed systems, such as theory and modeling, scalable design approach and framework, algorithms, analysis and comparison, design techniques and practical implementations. The special session welcomes innovative works from both the research and industry communities.

Papers on any of the following and related topics can be submitted to this special session:

- Monitoring and reconfiguration for NoCs and SoCs
- Scalable monitoring architectures for multicore systems
- Low-power monitors and sensors circuits
- Reconfiguration algorithms
- Reconfigurable and fault tolerant monitoring approaches
- Monitoring techniques for FPGA based designs
- Reconfiguration for fault tolerance and diagnostics
- Analysis, design and implementation of monitoring communication
- Design space exploration and tradeoff analysis
- Applications demonstrating monitoring and/or reconfiguration implementation
- Methods for distributed parallel system monitoring and reconfiguration
- Monitoring and reconfiguration in Cyber physical systems
- Formal methods for modeling, design and verification of monitoring and reconfiguration

SUBMISSION GUIDELINES

Prospective authors are encouraged to submit their manuscripts for review electronically through the following web page (<http://www.easychair.org/conferences/?conf=dsd2012>) or by sending the paper to the Session Chair via email (pakrli@utu.fi or ethnig@utu.fi) only if an unexpected web access problem is encountered) before the deadline for submission.

Each manuscript should include the complete paper text, all illustrations, and references. The manuscript should conform to the required IEEE format: single-spaced, double column, A4/US letter page size, 10-point size Times Roman font, up to 8 pages. In order to conduct a blind review, no indication of the authors' names should appear in the submitted manuscript, references included.

The IEEE Conference Publishing Services (CPS), Conference Publishing Services, publishes the DSD Proceedings, which are available worldwide through the IEEE Xplore Digital Library. An extended version of the best papers will be published in a special issue of the ISI-indexed "Microprocessors and Microsystems: Embedded Hardware Design" journal, printed by Elsevier Ltd.

IMPORTANT DATES

- **Submission of papers: March 26th, 2012**
- Notification of acceptance: May 7th, 2012
- Camera ready papers: May 31st, 2012

WEB LINKS

- DSD'12 web page:
www.univ-valenciennes.fr/dsd2012/
- Euromicro web page:
<http://www.euromicro.org>