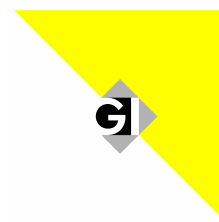




ARCS 2005

March 14-17 2005, Innsbruck (Austria)

<http://www.teco.edu/arcs05/>



Workshop

Dynamically Reconfigurable Systems (DRS)

March 17, 2005, Innsbruck (Austria)

Different reasons led in the past to the fact that reconfigurable systems get an increasing meaning. On the one hand they offer the possibility of carrying out the transition from Instruction Processing to Data Processing and therefore being enabled for overriding the classical Von-Neumann bottleneck. On the other hand Multi Standard/Multi Protocol chips can be realized on the basis of (partially) reconfigurable hardware, amortizing the high amount of future mask costs.

Reconfigurable hardware is meanwhile available in different granularities. Most variants have in common that they can be configured multiple times and even at run-time.

Dynamically reconfigurable systems (DRS) open therefore a new dimension for the use of this technology. Apart from adaptive systems, which can react to the needs an application, also aspects of energy efficiency and error tolerance can be realized. Thus, this technology inserts itself excellently into the vision of the Organic Computing initiative, which is forecasted by the common technical committee ARCS of the ITG and GI as new trend for computers and architectures in the year 2010.

Fundamental work of the last years points out the possibilities in principle. However the field-test still fails because of missing tools, architectures, run time systems and middleware layers. In the context of this workshop in particular the latter subject areas are topics for being regarded. Nevertheless, there is the possibility of submitting contributions to other topics from the domain of dynamically reconfigurable systems.

Workshop – topics (not limited to):

- DRS design and programming tools accounting: Energy efficiency, real-time capability, performance & error tolerance, transparency,...
- Architectures and models for DRS: Adaptive processors, specialized data-processing architectures, multigrain datapaths,...
- Run-time systems for DRS: Operating systems, intelligent middleware, heuristics, scheduling-mechanisms

Deadlines:

Submission until: **Jan. 23, 2005**
Notification of acceptance: **Feb. 04, 2005**
Final version until: **Feb. 10, 2005**

Submission of contributions:

Contributions can be submitted in English or German language using PDF or Postscript document format via following web-link:

<http://www-arcs05.itiv.uni-karlsruhe.de>

Organization:

Workshop Chairs:

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