

THE 1st INTERNATIONAL WORKSHOP ON RECONFIGURABLE COMPUTING EDUCATION

(RC education 2006)

MARCH 1, 2006, KARLSRUHE, GERMANY

RC
Education
2006

ISVLSI
2006

IN
CONJUNCTION
WITH:

CALL FOR PARTICIPATION

- **Opening Keynote**

Maya Gokhale, Los Alamos National Laboratory, New Mexico

Dr. Maya Gokhale the expert in Reconfigurable Computing and Parallel Languages and has contributed to embedded systems and supercomputing by developing programming models, compilers, languages, software systems and reconfigurable computers. She was among the first in compilers for software / configware co-design. Maya Gokhale has been with Burroughs, Hewlett-Packard, University of Delaware, IDA Supercomputing Research Center in Bowie, MD, and the Sarnoff Corporation. Maya Gokhale is presently Project Leader of Deployable Adaptive Processing Systems (DAPS) in the Space Data Systems Group at Los Alamos National Laboratory and primary investigator of a DARPA-sponsored Power Aware Computing program as well as Project Leader of the DOE Deployable Adaptive Processing Systems (DAPS) project.

- **Xilinx PlanAhead Workshop (in conjunction with RCeducation)**

Introducing the new design flow: using a hierarchical block-based incremental implementation methodology for high-density FPGA.

- **For detailed program and registration see web site:**

<http://helios.informatik.uni-kl.de/RCeducation>

Workshop Goals and Motivation

Google's yaw-dropping hit rates illustrate the pervasiveness of Reconfigurable Computing, already mainstream in embedded systems, and now being adopted by supercomputing (Cray, sgi, etc.) and many other application areas. From FPGA usage speed-up factors by orders of magnitude are reported, as well as floor space requirements and electricity invoice amounts reduced by one order of magnitude. Algorithmic cleverness is the secret of success, based on software to configware migration mechanisms are the secret of success, striving away from the memory-cycle-hungry instruction-stream-based computing paradigms.

The main hurdles on the way to heart-stopping new horizons of cheap highest performance are CS-related educational deficits causing the configware / software chasm and a methodology fragmentation between the different cultures of many application domains, caused by the current trend, where specialization is the target of education systems,

The workshop advocates the unification of common foundations: transdisciplinary common model approaches in CS curricula and CS-related curricula focused on fundamental problems which are shared across different application domains.

It is the goal of this first workshop to bring together researchers, educators, and industrial representatives. The workshop intends to provide a forum for presenting experiences and new educational approaches and for discussing the pros and cons.

Organization:

General Chair:

Jürgen Becker,
Universität Karlsruhe (TH),
Germany

General Co-Chair:

Reiner Hartenstein,
TU Kaiserslautern,
Germany

Program Co-Chair:

Joerg Henkel,
Universität Karlsruhe (TH),
Germany

Program Co-Chair:

Amar Mukherjee,
Univ. of Central Florida,
USA

Publicity Chair:

Don Bouldin,
University of Tennessee,
USA

Local Chair:

Michael Huebner,
Universität Karlsruhe (TH),
Germany

Finance Chair:

Michael Ullmann,
Universität Karlsruhe (TH),
Germany

**For the Pervasiveness of
Reconfigurable computing
visit**