

**PROCEEDINGS OF
THE 2009 INTERNATIONAL CONFERENCE ON
ENGINEERING OF RECONFIGURABLE SYSTEMS &
ALGORITHMS**

ERSA 2009

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ERSA'09

ENGINEERING OF RECONFIGURABLE SYSTEMS AND ALGORITHMS

The international conference on Engineering of Reconfigurable Systems and Algorithms (ERSA) was founded in 2001 and, since then, has been held each year in Las Vegas.

ERSA conference focuses on different approaches in engineering of reconfigurable systems: in hardware design and in implementing of algorithms; including theory, architecture, algorithms, design systems and applications that demonstrate the benefits of reconfigurable computing. ERSA conference solicits papers from all aspects of reconfigurable computing, including classical programmable logic, as well as configurable multiprogramming related papers.

Topics of interest include but are not limited to:

- Theory - Synthesis, Mapping, Parallelization, Partitioning...
- Software - CAD, Languages, Compilers, Operating Systems...
- Hardware - Adaptive and Dynamic Hardware, Reconfigurable Architectures...
- Applications - Mobile Computing, Automotive Industry, Smart Cameras...

ERSA conference is aiming to provide a forum where new research results can be quickly published and presented to research community, where people can discuss and share the latest ideas without a long publishing time. Only one and half months are required from submitting a paper to presenting it at the conference when following late CFP option. Late papers, which are not ready for conference time publication, are published in post-conference proceedings, in the official ERSA proceedings.

After the conference, best ERSA papers are published in reputable international journals: in The Journal of Supercomputing (Springer), IEEE TVLSI, ACM Transactions on Embedded Computing Systems special. This year, the special issue is published in ACM TECS: Configurable Computing: Configuring Algorithms, Processes and Architecture (CAPA'09). For more information, please visit the CAPA homepage at:

<http://acmtecs.acm.org/capa09.htm>

or

<http://ersaconf.org/capa09/>

This year, the program includes keynote and invited papers, invited panel session, regular papers, short papers and posters. We have three keynote speakers presenting for WORLDCOMP. These keynotes are: Prof. Viktor Prasanna, Univ. of Southern California, USA "Algorithm Design for Reconfigurable Computing Systems"; Dr. Jose L. Munoz, Deputy Director, National Science Foundation (NSF), USA "It's Like Deja-Vu All over Again... Again" and Dr. Rahul Razdan, CEO of Raztech LLC, USA "Future Directions in Reconfigurable Computing". We have also ERSA Invited talks from leading specialists: Prof. Christophe Jego, ENST Bretagne, France; Prof. Hideharu Amano, Keio University, Japan; Prof. Christophe Wolinski, University of Rennes I, France and Prof. Krzysztof Kuchcinski, Lund University, Sweden. In extent, we have an invited session on Adaptive / Evolvable Reconfigurable Computing Systems, where several leading researchers will give their viewpoints on reconfigurable computing prospects.

I hope that the ERSA conference, covering different aspects of reconfiguration techniques, will raise your awareness about the scope of reconfigurable or adaptive computing.

I would like to thank the authors for submitting their papers to ERSA'09 and for preparing the final versions of their papers for due date. I hope you all will have successful and enjoyable meeting in Las Vegas this year and I hope to meet you again in next years. I would like to extend my deepest gratitude for the efforts extended by the ERSA'09 Program Committee and to all external reviewers for their careful reading of all of the submitted papers.

Last but not least, I would like to thank the organizing team of The 2009 World Congress in Computer Science, Computer Engineering, and Applied Computing, and, especially, the General Chair Prof. Hamid Arabnia, for the continuous support and help in organizing the ERSA conference.

Toomas P. Plaks
ERSA Chairman
London
May, 2009

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