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## **Call for Participation, Industrial Demos, Sponsors ...**

### **Late paper submission is open up to the end of June**

## **The 2011 International Conference on ENGINEERING OF RECONFIGURABLE SYSTEMS AND ALGORITHMS - ERSA'11**

July 18-21, 2011, Monte Carlo Resort, Las Vegas, Nevada, USA

ERSA'11 Website: <http://ersaconf.org/ersa11/>

- **You have yet a possibility to submit short or poster paper. No official deadline for submission, papers are reviewed as we receive submissions**
- **We welcome reports on ongoing projects, student papers, and industrially oriented papers and demos**

**For more info, contact by email [inf@ersaconf.org](mailto:inf@ersaconf.org)**

## **ERSA Scope**

ERSA conference solicits papers from all aspects of reconfigurable computing, including classical programmable logic, as well as reconfigurable multiprocessing related papers. The range of topics covers theory, architecture, algorithms, design systems, and applications that demonstrate the benefits of reconfigurable computing:

- 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 explores emerging trends and novel ideas in the area of parallel, reconfigurable, high-performance computing architecture, design methods and applications. ERSA is promoting multidisciplinary research and new visionary approaches including bio-inspired architectures, computational biology, physics etc.

## **Industrial Partners Programme**

The ERSA conference is a part of federated congress, WORLDCOMP, of **more than 20 conferences, which brings together more than 2000 participants** around the world. WORLDCOMP covers all aspects of computer science, engineering, and applications.

At WORLDCOMP, there is a **cluster of closely related conferences** with mutual interests. This cluster forms an area of hardware design, reconfigurable computing systems and hardware, embedded systems, application specific systems, signal and image processing, and parallel, high-performance computing. We estimate that there are about **300-400 attendees who are interested in this cluster**. We anticipate that ERSA'11 will have around 70 attendees.

There are five levels of sponsorship, starting with bronze level and including a table + elec outlet + the opportunity to demo (if you like) your product to the attendees of ERSA and WORLDCOMP; around 2000 attendees.

For more info, visit the ERSA website, or contact by email at [inf@ersaconf.org](mailto:inf@ersaconf.org) .

## Keynotes

- **How Engineering Mathematics can Improve Software**  
Prof. David Lorge Parnas, Middle Road Software, Inc, Canada
- **The Nature of Cyber Security**  
Prof. Eugene H. Spafford, Purdue University CERIAS

## Invited Talks (not full list)

### *TOPIC Security:*

- Prof. Shiu-Kai Chin, **Logic Design for Access Control, Security, Trust, and Assurance**
- Prof. Jürgen Teich, **Verifying the Authorship of Embedded IP Cores: Watermarking and Core Identification Techniques**
- Prof. Ryan Kastner, **Enforcing Information Flow Guarantees in Reconfigurable Systems with Mix-trusted IP**
- ...

### *TOPIC Reconfigurable Hardware Architectures*

- Prof. Dominique Lavenier, **Next Generation Sequencing Data Processing. How reconfigurable computing can help?**
- Prof. Andy Tyrrell, **Reconfigurable and Evolvable Architectures and their Role in Designing Computational Systems**
- Dr. Eric Stahlberg, **Heterogeneous Accelerated Bioinformatics — Perspectives for Impacting Cancer Research and Treatment**
- ...

## ERSA'11 Sessions

- **Creating the Science & Engineering for Cyber-Security**  
Chair: Prof. Shiu-Kai Chin
- **RC + LBS: The Confluence of Secure Hardware and Programming Languages**  
Chair: Prof. William L. Harrison
- **Security: Threats and Solutions**  
Chair: Prof. Ryan Kastner
- **Reconfigurable and Evolvable Hardware Architectures**  
Chair: Dr. Eric Stahlberg
- **Runtime Adaptive Embedded Systems and Architectures**  
Chair: Prof. Roman Lysecky
- **How to Effectively Program Reconfigurable Multi-Core Embedded Systems?**  
Chair: Dr. Pedro C. Diniz
- **Adaptive and Reconfigurable Hardware**  
Chair: Prof. David Andrews

Please visit the **ERSA Website** for full list of Invited Speakers, Sessions, and Tutorials.  
<http://ersaconf.org/ersa11/>

## ERSA'11 Sponsors

The logo for ALTERA, featuring the word "ALTERA" in a blue, stylized, outlined font.The logo for Microsoft Research, with "Microsoft" in a small, grey, sans-serif font above the word "Research" in a large, bold, blue, sans-serif font.

**ERSA Chair**

Dr Toomas P Plaks, London, UK