

22nd Reconfigurable Architectures Workshop  
 May 25, 2015 Hyderabad, India  
[www.ece.lsu.edu/vaidy/raw](http://www.ece.lsu.edu/vaidy/raw)



The 22<sup>nd</sup> Reconfigurable Architectures Workshop (RAW 2015) will be held in Hyderabad, India in May 2015. RAW 2015 is associated with the [29th Annual International Parallel & Distributed Processing Symposium \(IPDPS 2015\)](#) and is sponsored by the [IEEE Computer Society Technical Committee on Parallel Processing](#). The workshop is one of the major meetings for researchers to present ideas, results, and on-going research on both theoretical and practical advances in Reconfigurable Computing.

A reconfigurable computing environment is characterized by the ability of underlying hardware architectures or devices to rapidly alter (often on the fly) the functionalities of their components and the interconnection between them to suit the problem at hand. The area has a rich theoretical tradition and wide practical applicability. There are several commercially available reconfigurable platforms (FPGAs and coarse-grained devices) and many modern applications (including embedded systems and HPC) use reconfigurable subsystems. An appropriate mix of theoretical foundations and practical considerations, including algorithms architectures, applications, technologies and tools, is essential to fully exploit the possibilities offered by reconfigurable computing. The Reconfigurable Architectures Workshop aims to provide a forum for creative and productive interaction for researchers and practitioners in the area.

**Topics of Interest:** Authors are invited to submit manuscripts of original unpublished research in all areas of reconfigurable systems, including architectures, algorithms, applications, software and cross-cutting areas. Topics of interest include, but are not limited to:

Architectures & Algorithms	Reconfigurable Systems & Applications	Software & Tools
<ul style="list-style-type: none"> <li>Theoretical Interconnect and Computation Models</li> <li>Algorithmic Techniques and Mapping</li> <li>Run-Time Reconfiguration Models and Architectures</li> <li>Emerging Technologies (optical models, 3D Interconnects, devices)</li> <li>Bounds and Complexity Issues</li> <li>Analog Arrays</li> </ul>	<ul style="list-style-type: none"> <li>Reconfigurable accelerators (HPC, Bioinformatics, Multicore environments)</li> <li>Embedded systems and Domain-Specific solutions (Digital Media, Gaming, Automotive applications)</li> <li>Distributed Systems &amp; Networks</li> <li>Wireless and Mobile Systems</li> <li>Emerging applications (Organic Computing, Biology-Inspired Solutions)</li> <li>Critical issues (Security, Energy efficiency, Fault-Tolerance)</li> </ul>	<ul style="list-style-type: none"> <li>High-Level Design Methods (Hardware/Software co-design, Compilers)</li> <li>System Support (Soft processor programming)</li> <li>Runtime Support</li> <li>Reconfiguration Techniques (reusable artifacts)</li> <li>Simulations and Prototyping (performance analysis, verification tools)</li> </ul>

**Submission Guidelines:**

All manuscripts will be reviewed by at least three members of the program committee. Submissions should be a complete manuscript or, in special cases, may be a summary of relevant work. The manuscript should be not exceed 8 single-spaced, double-column pages using 10-point size font on 8.5X11 inch pages ([IEEE conference style](#)) including references, figures and tables. Papers are to be submitted through [EDAS](#). Submitted papers should not have appeared in or be under consideration for a different workshop, conference or journal. It is also expected that all accepted papers (regular or poster) will be presented at the workshop by one of the authors.

**Publication:** IEEE CS Press will publish the IPDPS symposium and workshop abstracts as a printed volume. The complete symposium and workshop proceedings will also be published by IEEE CS Press as a CD-ROM disk and be available in the IEEE Digital Library.

## Important Dates:

Submission deadline	January 20, 2015
Decision notification	February 10, 2015
Camera-Ready papers due	February 28, 2015

## Organization:

<b>Workshop Chairs:</b>	Jürgen Becker, Karlsruhe Institute of Technology, Germany Ramachandran Vaidyanathan, Louisiana State University, USA	<a href="mailto:becker@kit.edu">becker@kit.edu</a> <a href="mailto:vaidy@lsu.edu">vaidy@lsu.edu</a>
<b>Program Chairs:</b>	Marco Santambrogio, Politecnico di Milano, Italy Wayne Luk, Imperial College, London, England	<a href="mailto:marco.santambrogio@polimi.it">marco.santambrogio@polimi.it</a> <a href="mailto:wl@doc.ic.ac.uk">wl@doc.ic.ac.uk</a>
<b>Program Vice-Chairs:</b>	Architectures & Algorithms: Steve Wilton, University of British Columbia, Canada Reconfigurable Systems & Applications: Diana Goehring, Ruhr-University Bochum, Germany Software & Tools: Ken Eguro, Microsoft Research, USA	<a href="mailto:stevew@ece.ubc.ca">stevew@ece.ubc.ca</a> <a href="mailto:diana.goehring@ruhr-uni-bochum.de">diana.goehring@ruhr-uni-bochum.de</a> <a href="mailto:eguro@microsoft.com">eguro@microsoft.com</a>
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<b>Steering Committee:</b>	Jürgen Becker, Karlsruhe Institute of Technology, Germany Viktor K. Prasanna, University of Southern California, USA Ramachandran Vaidyanathan, Louisiana State University, USA	
<b>Publicity:</b>	Chair: Weirong Jiang, Xilinx, USA Joao Cardoso, University of Porto, Portugal	<a href="mailto:weirong.jiang@xilinx.com">weirong.jiang@xilinx.com</a> <a href="mailto:jmpc@acm.org">jmpc@acm.org</a>

## Program Committee:

- Armando Astarloa, University of the Basque Country
- Zachary Baker, Los Alamos National Laboratory
- Jason Bakos, University of South Carolina
- Ivan Beretta, EPFL
- Christophe Bobda, University of Arkansas
- Bruce Cockburn, University of Alberta
- René Cumplido, INAOE
- Joydip Das, Achronix Semiconductor Corporation
- Carl Ebeling, Altera
- Ken Eguro, Microsoft Research
- Hatem El-Boghdadi, Cairo University
- Suhaib Fahmy, Nanyang Technological University
- Diana Goehring, Ruhr-University Bochum
- Martin Herbordt, Boston University
- Michael Hübner, Ruhr-University of Bochum (RUB)
- Eddie Hung, Imperial College
- Weirong Jiang, Xilinx
- Nachiket Kapre, Nanyang Technological University
- Dirk Koch, University of Oslo
- Akash Kumar, National University of Singapore
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- Gayatri Mehta, University of North Texas
- Seda Memik, Northwestern University
- Nele Mentens, KU Leuven
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- Christian Plessl, University of Paderborn
- Dionisios Pnevmatikatos, Technical University of Crete
- Mario Porrman, Bielefeld University
- Kentaro Sano, Tohoku University
- Marco Santambrogio, Politecnico di Milano
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- Dirk Stroobandt, Ghent University
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