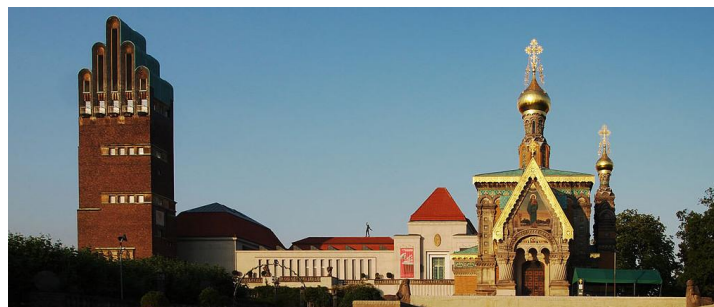


Call for Papers ARC2019



The 15th International
Symposium on
Applied Reconfigurable Computing
9-11 April 2019, Darmstadt, Germany
<http://www.arc2019.tu-darmstadt.de/>



TECHNISCHE
UNIVERSITÄT
DARMSTADT

Symposium Information

Reconfigurable computing has made its way into almost any area of computing. After decades of research, it has shown its potential and benefits in many application domains ranging from High-Performance-Computing to embedded systems, from security to signal processing. Yet, there are still many open research questions: What is the optimal architecture for a particular application domain and how can we find it? How can we map applications to RC architectures? How can we model different application domains? What are the consequences of new technologies for RC architectures and tools?

ARC aims at bringing together researchers and practitioners of reconfigurable computing with an emphasis on practical applications of this promising technology. The symposium will have a number of international invited speakers who will share their views on the future of reconfigurable technology.

The ARC 2019 proceedings will be published by Springer-Verlag as a Lecture Notes in Computer Science (LNCS) series volume and will also be available through the Springer Link on-line service. The authors of selected papers will be invited to submit extended versions of their work to a special issue of Springer's Journal of Signal Processing Systems (JSPS).



Tutorial Proposals

ARC now offers the option to propose tutorials on subjects related to the symposium topics. Three different formats can be offered: Embedded (lasting one session, about 1½ hours), half day, or full day. If you are interested to give a tutorial at ARC 2019, please contact one of the chairs and provide a brief overview of the proposed tutorial (1-2 pages), including information about possible and preferred formats. The deadline for submitting these tutorial proposals is 18 January 2019.

Important Dates

Submission Deadline:	23 November 2018 7 December 2018
Tutorial Deadline:	18 January 2019
Author Notification:	18 January 2019
Camera-Ready:	10 February 2019

No further extensions will be granted.

Submission Information

Authors are invited to submit original contributions in English including, but not limited to, the areas of interest mentioned below. Submissions must be uploaded to the ARC website and identify the format of the contribution as either:

- **Long Papers: (15 pages maximum)** should cover mainly completed results (oral presentation)
- **Short Papers: (10 pages maximum)** may also treat work-in-progress or report on very recent developments (poster presentation)

Note that these page limits include tables, figures and references. The format of the paper should follow the Springer LNCS Series formatting style.

Topics of Interest

Design Methods & Tools

- High-level Languages & Compilation
- Simulation & Synthesis
- Estimation Techniques
- Design Space Exploration
- Run-Time Systems & Virtualization

Applications

- Security & Cryptography
- Time sensitive/critical networks
- Big Data, HPC, Event Processing
- Embedded Computing & DSP
- Robotics, Space, Bioinformatics, Automotive
- Safety & Mission Critical Systems
- Deep Learning & Neural Networks

Architectures

- Self-adaptive, evolvable
- Heterogeneous
- Low-Power Designs
- Approximate Computing
- Fine-/Coarse-/Mixed-grained
- Embedded MPSoCs
- Interconnect (NoCs, ...)
- Resilient & Fault Tolerant, ...)

Trends (in)

- Teaching RC
- Surveys and Future Trends
- Benchmarks
- Emerging Technologies
- Cyberphysical systems

Organizing Committee

General Chairs:

- Andreas Koch
(Technische Universität Darmstadt, Germany)
- Roger Woods
(Queen's University Belfast, UK)

Program Chairs:

- Christian Hochberger
(Technische Universität Darmstadt, Germany)
- Brent Nelson
(Brigham Young University, Provo, USA)

Proceedings Chair:

- Pedro Diniz (INESC-ID, Lisboa, Portugal)

Web Chair:

- Andreas Engel
(Technische Universität Darmstadt, Germany)

Program Committee:

- Hideharu Amano
(Keio University)
- Zachary Baker
(Los Alamos National Laboratory)
- Juergen Becker
(Karlsruhe Institute of Technology)
- Nikolaos Bellas
(University of Thessaly, Greece)
- Mladen Berekovic
(TU Braunschweig)
- Joao Bispo
(University of Porto)
- Vanderlei Bonato
(University of São Paulo)
- Christos Bouganis
(Imperial College London)
- João Canas Ferreira
(University of Porto)
- Joao Cardoso
(University of Porto)
- Luigi Carro
(Universidade Federal do Rio Grande do Sul)
- Ray Cheung
(City University of Hong Kong)
- Daniel Chillet
(CAIRN - IRISA/ENSSAT)
- Steven Derrien
(Université de Rennes 1)
- Giorgos Dimitrakopoulos
(Democritus University of Thrace)
- Pedro Diniz
(INESC-ID, Lisboa, Portugal)
- Antonio Ferrari
(University of Aveiro)
- Ricardo Ferreira
(Universidade Federal de Vicosa)
- Apostolos Fournaris
(Technological Educational Institute of Western Greece)
- Roberto Giorgi
(University of Siena)
- Diana Goehring
(TU Dresden)
- Marek Gorgon
(AGH University of Science and Technology)
- Frank Hannig
(Friedrich-Alexander University Erlangen-Nürnberg)
- Jim Harkin
(University of Ulster)

- Christian Hochberger
(TU Darmstadt)
- Michael Huebner
(Brandenburg University of Technology Cottbus)
- Kimon Karras
(InAccel)
- Chrysovalantis Kavousianos
(University of Ioannina)
- Krzysztof Kepa
(GE Global Research)
- Georgios Keramidas
(Technological Educational Institute of Western Greece)
- Andreas Koch
(TU Darmstadt)
- Tomasz Kryjak
(AGH University of Science and Technology)
- Konstantinos Masselos
(University of Peloponnese)
- Cathal Mccabe
(Xilinx)
- Antonio Miele
(Politecnico di Milano)
- Takefumi Miyoshi
(e-trees.Japan, Inc.)
- Walid Najjar
(University of California Riverside)
- Brent Nelson
(Brigham Young University)
- Horacio Neto
(Universidade de Lisboa)
- Dimitris Nikolos
(University of Patras)
- Kyprianos Papadimitriou
(Neapolis University Paphos &
Technical University of Crete)
- Monica Pereira
(Universidade Federal do Rio Grande do Norte)
- Thilo Pionteck
(Otto-von-Guericke Universität Magdeburg)
- Marco Platzner
(University of Paderborn)
- Mihalis Psarakis
(University of Piraeus)
- Kyle Rupnow
(Inspirit IoT)
- Kentaro Sano
(Riken R-CCS)
- Marco Domenico Santambrogio
(Politecnico di Milano)
- Yukinori Sato
(Toyohashi University of Technology)
- Antonio Carlos Schneider Beck Filho
(Universidade Federal do Rio Grande do Sul)
- Yuichiro Shibata
(Nagasaki University)
- Dimitrios Soudris
(National Technical University of Athens)
- Theocharis Theocharides
(University of Cyprus)
- George Theodoridis
(University of Patras)
- David Thomas
(Imperial College, London)
- Nikolaos Voros
(Technological Educational Institute of Western Greece)
- Chao Wang
(University of Science and Technology of China)
- Markus Weinhardt
(Osnabrueck University of Applied Sciences)
- Roger Woods
(Queen's University Belfast)
- Yoshiki Yamaguchi
(University of Tsukuba)