





2<sup>nd</sup> Summer School on Progression and Diversity of Reconfigurable Architectures and Tools

# 19-23 September 2016, Karlsruhe, Germany

The PANDORA 2016 summer school is part of an ongoing collaboration project, named TEAChER (<a href="http://proteas.microlab.ntua.gr/teacher/">http://proteas.microlab.ntua.gr/teacher/</a>), between KIT (Karlsruhe Institute of Technology) and NTUA (National Technical University of Athens) for developing educational material related to advanced reconfigurable architectures and CAD algorithms lessons.

The aim of the summer school is to provide breakthrough knowledge to students and young researchers on reconfigurable computing and CAD tools. More specifically, a binational selection of German and Greek participants from the partner universities KIT and NTUA will attend lectures, talks and hands-on labs given by experts in the fields of reconfigurable architectures and respective CAD algorithms. The topics within the summer school go beyond the usual lectures in its fields and cover not only established and commercial technologies, but also recent research results and trends. Moreover the focus is on providing the participants with the knowledge, methodologies and tools for developing and exploring their own reconfigurable architectures. Therefore, we employ the unique TEAChER framework with its virtual laboratory, which is a perfect playground for quickly developing and evaluating custom FPGAs without the efforts and expenses of actual physical implementation.

Furthermore, we expect the summer school to enhance the co-operation among the researchers of two universities. The Summer Program will include both lectures and lab projects, which will be provided by experienced experts from both KIT and NTUA. Additionally, the PhD students will have the opportunity to present their research activities in poster sessions. Finally, a panel session for discussion and brainstorming will motivate the attendees to exchange ideas about the future trends of reconfigurable architectures as well as will provide feedback about the future activities within the TEAChER framework.

# Consortium

- Karlsruhe Institute of Technology (KIT), Institute for Information Processing Technologies
   (ITIV)
- National Technical University of Athens (NTUA), Institute of Communication and Computer Systems (ICCS)

#### Venue

- This year's summer school will be held at the Karlsruhe Institute of Technology (KIT),
   Karlsruhe, Germany.
- Further details TBA

# **Participants**

- 10 PhD students and advanced Master students from KIT (Karlsruhe, Germany)
- 10 PhD students and advanced Master students from NTUA (Athens, Greece)

For application visit <a href="http://proteas.microlab.ntua.gr/teacher/">http://proteas.microlab.ntua.gr/teacher/</a>

#### Grants

- Travel grants for up to 10 Greek students can be provided through the TEAChER project in accordance with DAAD

# **Important dates**

- 06 September 2016: Application Deadline
- 09 September 2016: Notification of Acceptance
- 19-23 September 2016: Summer School

# **Topics**

The summer school will cover the following topics in lectures and lab exercises:

- Reconfigurable architectures and CAD tools for 2D FPGAs
- 3D stacking technology
- 3D FPGA architectures
- CAD tools for 3D FPGAs
- 3D virtual FPGA and prototyping methodologies
- Presentation and communication skills
- Design contest

A detailed program will be provided soon.

### Contact



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