



Call for Papers - SCOPES

June 1-3, 2015, Schloss Rheinfels, St. Goar, Germany, <http://www.scopesconf.org>

A next edition of the workshop on Software and Compilers for Embedded Systems (SCOPES) will be organized in 2015. The workshop will feature a combination of research papers and research presentations (details see below). The papers and presentation abstracts will also be published in the ACM digital library. The workshop is held in cooperation with ACM SIGBED and EDAA.

AIM AND SCOPE

The influence of embedded systems is constantly growing. Increasingly powerful and versatile devices are developed and put on the market at a fast pace. Their functionality and number of features is increasing, and so are the constraints on the systems concerning size, performance, energy dissipation and timing predictability. To meet all these constraints, multi-processor systems on a chip (MPSoCs) are becoming popular in embedded systems. In order to meet the performance and energy constraints of embedded applications, heterogeneous architectures incorporating functional units optimized for specific functions are commonly employed. This technological trend has dramatic consequences on the parallelization, mapping, compiler and design technology used to develop these systems.

The SCOPES workshop focuses on the software generation process for modern embedded systems. Topics of interest include all aspects of the compilation and mapping process of embedded single and multi-processor systems. This includes (but is not limited to):

- models of computation and programming languages;
- performance analysis techniques for models of computation;
- automatic code parallelization techniques;
- mapping and scheduling techniques for embedded multi-processor systems;
- code generation techniques for embedded single- and multi-processor architectures;
- design-space exploration techniques for use in the HW/SW codesign process;
- techniques to exploit the dynamic behavior in embedded applications;
- interactions between operating systems and compilers;
- techniques for compiler aided profiling, measurement, debugging and validation of embedded software.

WORKSHOP STRUCTURE

The workshop structure (presentations followed by intensive discussions) allows for an interactive atmosphere in which industrial and academic representatives can exchange new ideas and trends in the area MPSoC mapping and code generation.

SUBMISSION INSTRUCTIONS

SCOPES accepts two types of submissions (details can be found on scopesconf.org):

Research papers

Research papers should present original research results not

published or submitted for publication in other forums. Accepted papers will be published via the ACM digital library and they will be scheduled for a presentation during the workshop. Authors of accepted long research papers will be given the opportunity to publish a 10 page paper in the workshop proceedings (available through ACM digital library).

Research presentations

Research presentations should present research results relevant to the topics addressed by the workshop. These presentations may be based on research results that have previously been presented in other forums. Accepted presentations will be scheduled for a presentation during the workshop. Authors of accepted research presentations will be given the opportunity to publish a 4 page abstract in the workshop proceedings (available through ACM digital library). Publication in the proceedings is optional and the authors may decide not to do so.

VENUE

The workshop will take place in the beautiful "Schloss Rheinfels" hotel at St. Goar, Germany. Schloss Rheinfels is a castle at one of the nicest places within the Rhine valley, itself a world heritage site. Among a set of hotels focusing on wellness, the hotel is voted yearly as being part of the top 3 conference hotels in Germany. There is a beautiful view from the hotel onto the river Rhine.

IMPORTANT DATES

Research papers

Full research paper submission:	March 29, 2015 (extended deadline)
Notification of acceptance:	Apr 17, 2015
Final paper submission:	May 1, 2015

Research presentations

Abstract submission research presentations:	March 29, 2015 (extended deadline)
Notification of acceptance:	Apr 17, 2015
Final abstract submission:	May 1, 2015

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