3rd Workshop on Virtual Prototyping of Parallel and Embedded Systems - ViPES

www.vipes-workshop.org

July 19th, 2015, Samos, Greece


Virtual prototyping stands for the development of hardware/software systems without using a real hardware prototype, i.e. no printed circuit board with electronic devices such as processors, field programmable gate arrays, peripherals and other devices is needed. The advantage is the possibility to exchange parts in the system setup with faster turnaround times in comparison to the traditional development process, where a time consuming redesign of the complete board has to be done. Since some years, the community exploiting these novel methods has grown as time to market plays a major role in industry. Additionally, the increasing complexity of embedded systems, which are more and more realized as parallel and distributed cyber-physical systems, forces system architects to perform a time-consuming design space exploration. For academics, virtual prototyping is also a hot topic. Researchers use virtual prototypes to develop future systems and to enable an outlook into the next generation of embedded systems and devices. The wide range of application scenarios for this type of development includes amongst others automotive, avionics, railway, consumer and medicine applications. This workshop targets the domain of virtual prototyping focusing the following topics:

- Virtual prototyping development tools
- Methods for virtual prototyping of complex systems
- Application development with virtual platforms
- Methods for Hardware / Software Codesign with virtual platforms
- Design space exploration for parallel and distributed multicore and cyber-physical systems
- Estimation of system characteristics in an early stage of development
- Functional verification at a high level of abstraction
- Methods for modeling of IP cores with SystemC
- Usage of Architecture Description Languages (ADL) for IP – core development

Submission Guidelines:

All manuscripts will be reviewed by at least three members of the program committee. Submissions should be a complete manuscript (not to exceed 6 pages of single spaced text, including figures and tables. Submissions should be in PDF-format. Templates for paper preparation can be found at: http://www.ieee.org/web/publications/pubservices/confpub/AuthorTools/conferenceTemplates.html

All accepted papers will be published in the proceedings of the SAMOS conference in a section for ViPES. Submitted papers should not have appeared in or be under consideration for a different workshop or conference. The 5 best ranked papers (according to the review results) will be invited to submit an extended version to a special issue of a journal with high reputation.

Important Dates:

Submission deadline: March 16th, 2015
Decision notification: April 21st, 2015
Camera-Ready: May 11th, 2015

Submission Webpage: https://easychair.org/conferences/?conf=vipes2015

Organization:

Workshop Co-Chairs: Michael Hübner, Ruhr-University Bochum  
Diana Göhringer, Ruhr-University Bochum

Program Co-Chairs: Cristina Silvano, Politecnico di Milano  
Jeronimo Castrillon, TU Dresden

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