

HPCA-16 Call for Industry Papers



16th International Symposium on High-Performance Computer Architecture

Bangalore, India, January 9-13, 2010

<http://www.hpcaconf.org/hpca16>

(collocated with PPOPP-2010)

The 16th International Symposium on High-Performance Computer Architecture (HPCA-16) will include a industrial session on the architecture of future platforms, including processors, caches, memory and I/O. The objective of this session is to provide a unique forum for industry leaders to present their perspective on technical challenges and the approaches to resolve them. Presenting such technical challenges will also encourage the research community to investigate solutions. The session will include a small number of papers (approximately 3-5) selected based on depth and relevance to the HPCA audience.

Architects, designers and developers involved in some aspect of industrial computer systems design and development are invited to submit a paper (short or long are acceptable) describing new challenges, issues, and opportunities that need or can be addressed in the next-generation computer systems. Topics of interest include, but are not limited to:

- * Circuit technology: noise, process variation, and memory scaling
- * Issues with deeply scaled CMOS
- * Design complexity and verification
- * Power, energy, and temperature
- * Systems reliability
- * Implications of software on architecture
- * New application domains
- * Microarchitecture
- * Chip-level parallel systems
- * Memory systems
- * Storage systems
- * Interconnect and network interfaces
- * Innovative architectural paradigms
- * Innovative hardware/software trade-offs
- * Advanced compilation techniques
- * Case Studies and Performance Evaluation of Real Machines

Authors are requested to submit their short papers for consideration to the industry session chairs, Michael Gschwind (mkg@us.ibm.com) and Ravi Iyer (ravishankar.iyer@intel.com) no later than **11:59pm PST, October 2nd, 2009**. Submissions should be PDF files and should not exceed 10 pages (around 3,000 words). Authors will be notified about the decision by October 30th, 2009. Accepted papers will be printed in the HPCA Proceedings and the authors will present their work at the conference. Presentations will be posted on the conference website.

Updates to submission instructions will be made available at
<http://www.hpcaconf.org/hpca16/index.html>

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