



HPCA-15 Call for Industry Papers

15th International Symposium on High-Performance Computer Architecture

Similar to the past few years, the 15th International Symposium on High-Performance Computer Architecture (HPCA-15) will include an industrial papers' session. 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 encourage others in the research community to investigate solutions. The session will include a small number of short papers (approximately 3-5) selected based on depth and relevance to the HPCA audience. Please note that for this session, we are soliciting papers from industry (researchers from academia can be included as co-authors, but the work needs to be done in industry, with main contributions coming from industry authors).

Researchers, designers and developers involved in some aspect of industrial computer systems design and development are invited to submit a paper 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:

- Implications of circuit technology: noise, process variation, and memory scaling
- Architectural issues with deeply scaled CMOS
- Microarchitecture and chip-level parallel systems
- Memory systems
- Storage systems
- Interconnect and network interfaces
- Design complexity and verification
- Power, energy, and temperature
- Systems reliability
- Interaction of virtualization and hardware
- Architectures for new application domains
- Innovative architectural paradigms
- Innovative hardware/software trade-offs
- Impact of compilers on architectures
- Performance characterization of real machines and emerging workloads

Authors are requested to submit their short papers for consideration to the chair, Partha Ranganathan (partha.ranganathan@hp.com) no later than **11:59PM PST, September 30th, 2008**. Submissions should be PDF files and should not exceed 10 pages (around 3,000 words) according to the format instructions in <http://www.hpcaconf.org/hpca15>. Authors will be notified of inclusion in the conference on October 31st, 2008. 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.

Chair: Partha Ranganathan, Hewlett Packard Labs