

Call for Papers

Industry Session in HPCA-20

The 20th International Symposium on High Performance Computer Architecture (HPCA-20)

<http://hpca20.ece.ufl.edu/>

February 15-19, 2014, Orlando, Florida

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Conference Description

The 20th International Symposium on High-Performance Computer Architecture (HPCA-20) will include an industrial session on the architecture of future platforms technologies. The objective of this session is to provide a unique forum for the industry leaders to present their perspective on technical challenges facing future platforms and discuss potential solutions. The discussion in this forum is expected to educate the wider computer architecture community on the challenges facing the industry and to encourage them 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 describing new challenges, issues, and opportunities in the next-generation computer systems. Topics of interest include, but are not limited to:

- Heterogeneous Computing: SoCs, CPU+GPU, and HW Accelerators
- Parallelism from Instruction Level to Chip level
- Benchmarking including new application domains
- Circuit technology: noise, process variation, and memory scaling
- Issues with deeply scaled CMOS
- Design complexity and verification
- Power, energy, and temperature
- Systems reliability
- Microarchitecture
- Memory and 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
- New computing and usage paradigms in the client/server model

Accepted papers will be printed in the HPCA Proceedings and the authors will present their work at the conference.

Submission Guidelines

Authors should submit an electronic copy of the full paper in PDF that does not exceed 12 pages using the "standard" double-column format (the same format requirements as submissions to the main track). Submissions must be unpublished and not submitted for publication elsewhere. Work that already appeared in unpublished or informally published workshops proceedings may be submitted. Submissions deadline is **7:59 pm EDT (23:59 UTC), October 10th, 2013** and will be handled by the EasyChair conference management system:

<https://www.easychair.org/conferences/?conf=hpca20industry>

Important Dates

Paper Submission: October 10, 2013

Notification: November 13, 2013

Camera-ready: TBD January 2014

Symposium: February 15-19, 2014