Industry Session Call for Papers

HPCA 2018

24th IEEE International Symposium on High-Performance Computer Architecture

http://hpca2018.ece.ucsb.edu/
24 – 28 February 2018
Vienna, Austria

GENERAL CHAIR
Michael Gschwind, IBM TJ Watson
PROGRAM CHAIR
Yuan Xie, UC Santa Barbara
INDUSTRIAL SESSION CHAIR
Valentina Salapura, IBM TJ Watson
WORKSHOPS & TUTORIALS CHAIR
Shahar Kvatinsky, Technion
SPONSORSHIP CHAIR
Xuehai Qian, USC
STUDENT TRAVEL CHAIR
Ronald Mak, San Jose State U
PUBLICATIONS CHAIR
Zehra Sura, IBM TJ Watson
WEB CHAIR
Peng Gu, UC Santa Barbara
PUBLICITY CO-CHAIRS
Jishen Zhao, UC Santa Cruz
Muhammad Shafique, TU Wien
Yinhe Han, ICT
SUBMISSIONS CHAIR
Xing Hu, UC Santa Barbara
INDUSTRIAL SESSION PROGRAM COMMITTEE
Arkaprava Basu, AMD
Matt Blumrich, Nvidia
Zeshan Chishti, Intel
Aamer Jelal, Nvidia
Sally McKee, Rambus
Alex Ramirez, Google
Dana Vantrease, Amazon
Ren Wang, Intel

The International Symposium on High-Performance Computer Architecture includes an industry session on the architecture of future systems technologies. The objective of this session is to provide a unique forum for industry participants to present their perspective on technical challenges facing future systems 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 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:

• Processor, cache, and memory architectures
• Parallel computer architectures
• Multicore and multiprocessor architectures
• Impact of technology on architecture
• Dependable/secure architectures
• High-performance I/O systems
• Embedded, reconfigurable, and heterogeneous architectures
• Interconnect and network interface architectures
• Architectures for cloud-based HPC and data centers
• Innovative hardware/software trade-offs
• Impact of compilers and system software on architecture
• Performance modeling and evaluation
• Architecture for novel application workloads, such as AI or graph analytics
• Architectures for emerging technology and applications

Authors should submit an abstract by **September 17, 2017 11:59 PM CDT**. They should submit the full version of the paper **September 24, 2017, 11:59 PM CDT** at https://easychair.org/conferences/?conf=ishpca2018.

No extensions will be granted. The full version should be a PDF file following the submission guidelines that are available at the HPCA website. Papers should be submitted for blind review.

See the HPCA 2018 website at http://hpca2018.ece.ucsb.edu for additional information about HPCA 2018 and submission details.