A Symposium on High-Performance Chips

Stanford University

August 18-20, 2019

Call for Contributions

AUTHORS’ SCHEDULE

Submission date: March 23, 2019
Final Version due: July 16, 2019
Acceptance Notification: May 1, 2019
Poster Submissions due: July 3, 2019

AREAS OF INTEREST:

- General-Purpose Processor Chips
  - Hi Performance and Low Power
  - Multi-Core, Highly-Reliable Systems
- Security
  - Secure Hardware
  - Hardware Support for Software Security
- Mobile and Embedded Devices
  - Graphics/Multimedia/Game
  - SoC, Security, and DSP Chips
- Communications and Networking
  - Wireless LAN/WAN/PAN
  - Network and IO Processors
- Emerging Computation Architectures
  - Machine Learning, Vision and Graphics/Compute Engines
  - Data Analytics and Big Data processing
  - IoT and Always-On Functions
  - Neuromorphic and Quantum Computing
- Other Chips
  - FPGAs and FPGA-Based Systems
  - Custom Chips for Emerging Applications
  - Open-Source Chips
- Enabling Technologies
  - Power and Thermal Management
  - Packaging and Testing
  - Display Technologies
  - On-Chip Optics & Sensors
  - Novel Computing Technologies
- Memory Technologies
  - Persistent Memory, Phase Change
  - Packaging, 3D, Stacked
- Software for Multi-core, Heterogeneous Systems
  - Programming models, Runtime systems
  - Performance, Power Debug and Evaluation

AUTHOR INFORMATION and FORMAT

Regular presentations are 30-minute talks. Submissions for consideration consist of an extended abstract with a maximum length of two pages. A select group of presenters will be invited to submit papers for inclusion in a special issue of IEEE Micro.

Poster submissions are also accepted from both industry and academia, and consist of 4 slides with a one-page summary. In particular, student posters describing applied research performed at a university are encouraged. The most outstanding student poster will receive the Best Student Poster Award.

Regular presentation and poster submissions are evaluated by the Program Committee on the basis of: performance of the device(s), degree of innovation, use of advanced technology, potential market significance and anticipated interest to the audience. Both regular presentation slides and posters are published in the Hot Chips proceedings. To submit, go to

https://www.softconf.com/k/hotchips31/

Send program-related questions and abstract to the program co-chairs Ian Bratt and Christos Kozyrakis at: program@hotchips.org, and send conference- and organization-related questions to the general chair, John Davis, at: info@hotchips.org. Check the Hot Chips webpage for updates: http://www.hotchips.org and also for the Hot Chips 30 - 2018 proceedings under Archives which are now open to the public.

Sponsored by the Technical Committee on Microprocessors and Microcomputers of the IEEE Computer Society, and technically co-sponsored by the IEEE Solid State Circuits Society