

# Asap2019

## The 30Th Annual IEEE International Conference On Application-Specific Systems, Architectures And Processors Cornell Tech, New York, Usa, July 15-17, 2019

### Overview

The 30th IEEE International Conference on Application-specific Systems, Architectures and Processors will take place in New York, US. The 2019 edition of the conference is organized by **Cornell Tech**.

The history of the event traces back to the International Workshop on Systolic Arrays, organized in 1986 in Oxford, UK. It later developed into the International Conference on Application Specific Array Processors. With its current title, it was organized for the first time in Chicago, USA in 1996. Since then it has alternated between Europe and North-America. The conference will cover the theory and practice of application-specific systems, architectures and processors. The 2019 conference will build upon traditional strengths in areas such as computer arithmetic, cryptography, compression, signal and image processing, network processing, reconfigurable computing, application-specific instruction-set processors, and hardware accelerators.

### Organizing Committees

- **General Chair:** Zhiru Zhang, Cornell University
- **Program Chair:** Yun (Eric) Liang, Peking University
- **Publicity Chair:** Zhenman Fang, Xilinx/Simon Fraser University
- **Finance Chair:** Jieming Yin, AMD Research
- **Sponsorship Chair:** Guojie Luo, Peking University
- **Local Chair:** Bo Yuan, Rutgers University
- **Web Chair:** Cunxi Yu, Cornell University

### Submission

All manuscripts will be reviewed by at least three members of the program committee, with a **double-blind** review process. Submissions should be a complete manuscript or, in special cases, may be a summary of relevant work. Manuscript for **full paper** should not exceed **8** single- space, double-column pages using 10-point size font on 8.5x11 inch pages (IEEE conference style) including references, figures, and tables. Manuscript for **short papers** should not exceed **4** single-space, double-column pages. Manuscripts for **posters** should not exceed **2** single-spaced, double-column pages. Submitted papers should not have appeared in or be under submission for a different workshop, conference or journal. It is also expected that all accepted papers (full, short or poster) will be presented at ASAP by one of the authors. Accepted full, short and poster papers will be included in the proceedings and published in IEEE Xplore. Failure to present will result in the removal of the submission from the proceedings before publication. All papers must be submitted electronically in PDF format.

### Submission website

<https://asap2019.csl.cornell.edu/submission/>

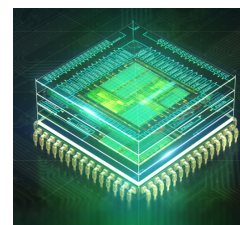
### CALL FOR PAPERS

[asap2019.csl.cornell.edu/cfp.html](https://asap2019.csl.cornell.edu/cfp.html)

### Important Dates

- **Abstract deadline** : **April 2, 2019**
- **Full paper deadline** : **April 8, 2019**
- **Decision notification:** May 6, 2019
- **Camera ready** : May 29, 2019

### Topics of Interest



- Big data analytics
- Cloud computing infrastructures and acceleration
- Heterogeneous computing in data centers
- Accelerating data center workloads
- FPGA-based deep learning
- Embedded systems and domain-specific solutions (digital media, gaming, automotive applications)
- Accelerating genomic computations
- Acceleration of data analytics
- Reconfigurable computing in the IoT era
- Applications in finance
- Wireless and mobile systems
- Application-aware controller synthesis
- Emerging technologies (optical models, 3D Interconnects, devices)
- Reconfigurable accelerators
- Hardware and software architectures for cyber-physical systems
- Distributed systems & networks
- Critical issues (security, energy efficiency, fault-tolerance)
- Autonomous and semi-autonomous large-scale CPS
- Autonomic computing systems
- High-level design methods (hardware/software co-design, compilers)
- Simulations and prototyping (performance analysis, verification tools)
- Socio-technical systems