FIRST ANNOUNCEMENT AND CALL FOR PAPERS

2019 SYMPOSIUM ON VLSI TECHNOLOGY
Pushing the Limits of Semiconductors for United and Connected World

BIHA Royal Hotel Kyoto, Japan
Sunday - Friday, June 9 – 14, 2019
June 10 Short Course
June 11-13 Technical Sessions
June 14 Friday Forum

For details, please visit: www.vlsisymposium.org

Symposium Scope
Papers will be selected based on technical innovation, advances relative to previously published work, credibility of claims, and quality of writing and illustrations. The scope includes:

• Technologies for IoT including ultra-low power, energy harvest, wearable, sensors, display, and communication devices
• Technologies for AI including CPU, GPU, in-memory computing, and stochastic computing
• Stand-alone and embedded memories including SRAM, DRAM, 3D NAND, MRAM, PCRAM, ReRAM, FeRAM and other new memories
• CMOS technology, microprocessors and SoCs including scaling, manufacturing, and yield optimization
• RF/analog and sensors including mixed-signal, analog, I/O, power device, imaging and MEMS
• Process and material technologies including transistor process, high mobility channels, SOI, lithography and patterning, and 3D NAND processes
• Packaging technologies and system-in-package (SIP) including through-silicon- vias (TSVs); 3D and 2.5D integration
• Photonics technology and beyond CMOS devices including Si photonics; quantum computing and spintronics devices

Joint Circuits and Technology Focus Sessions
Joint circuits and technology focus sessions will be offered in the following special topics of joint interest:

• Tech & system for new computing: design and technology for enabling high performance AI, neuromorphic computing, beyond Von Neumann architecture, etc.
• Design and technology for scaling extension: design for manufacturing, process-design co-optimization, on-die monitoring of variability and reliability
• Embedded memory technology and design: SRAM, DRAM, Flash, PCRAM, ReRAM, MRAM, etc.
• 3D and heterogeneous integration: power and thermal management, inter-chip communication, SiP architectures and applications

Paper Submission
Prospective authors must submit two-page camera-ready papers and abstracts through the Symposium’s website, www.vlsisymposium.org. Accepted papers will be published as submitted, with no revisions permitted. Authors must follow detailed instructions provided within the “Authors” section of the website, including the Authors’ Guide and Pre-publication Policy.

Best Student Paper Award
Best Student Paper Award selection will be based on quality and presentation of the paper at the Symposium. The winning student will be presented a monetary award and a certificate at the 2020 Symposium opening session. The student must be enrolled as a full-time student at the time of submission, be the leading author and presenter of the paper, and indicate when submitting the paper that the paper should be considered for the award.

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