Join us to celebrate the 40th Anniversary of the VLSI Symposium!!

SECOND ANNOUNCEMENT AND CALL FOR PAPERS

2020 SYMPOSIUM ON VLSI CIRCUITS
The Next 40 Years of VLSI for Ubiquitous Intelligence

Hilton Hawaiian Village, HONOLULU, Hawaii, USA
Monday – Friday, June 15-19, 2020
(June 15 Short Course,
June 16-18 Technical Sessions,
June 19 Friday Forum)

Paper Submission Deadline: 23:59 PST Monday, February 10, 2020
For complete conference, author, and registration information, visit:
http://www.vlsisymposium.org

Scope

The Circuits Symposium is placing special emphasis on several Innovative System focus areas, and encourages paper submissions on:

- Machine and deep learning
- FPGA-based accelerators
- Internet of Things
- Industrial electronics
- Big Data management
- Biomedical applications
- Robotics and autonomous transportation

In addition, submissions are welcomed in all of the following circuits areas:

- Processors, SoCs, and Machine Learning
- Digital circuits, signal integrity, and IOs
- Hardware security
- Memory circuits, architectures, and interfaces
- Biomedical circuits
- Sensors, imagers, and display circuits
- Power conversion circuits
- Analog, amplifier and filter circuits
- Wireless receivers and transmitters
- Data converters
- Frequency generation and clock circuits
- Wireline and optical transceivers

Highlights

There will be a full four-day overlap between the co-located Symposia on VLSI Technology and Circuits, providing unique opportunities for interaction.

- Access to both Symposia with a single registration
- Circuit and Technology Joint Focus Sessions:
  - Silicon Photonics
  - 5G/mm-wave
  - Artificial Intelligence/ Machine Learning
  - System/Design-Technology Co-Optimization
  - Heterogeneous Integration

The Symposia also offer ample opportunities to network with colleagues in both technical areas

- Rump Sessions:
  - 40 years of VLSI to enable the Future of Computing
  - The Future of Memory (and what can logic learn from it?)
  - Human vs. Machine: The Future Role of AI/Machine Learning in Circuit Design
- Evening reception and joint banquet
- SSCS / EDS Women in Engineering & Young Professionals events

In addition to technical sessions, attendees participate in interactive events with authors, instructors, and experts from industry and academia

- Multiple short courses on a variety of relevant topics
- Demo session for outstanding papers
- Friday forum

Further Information

The Symposia website is the central resource for additional information, including details on paper submissions and Best Student Paper eligibility.

http://vlsisymposium.org

2020 VLSI CIRCUITS SYMPOSIUM HONOLULU

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Symposium Scope

Celebrating its 40th edition (1981-2020), the VLSI Technology symposium calls for papers in the following areas:
• **Technologies for Internet of Things**
• **Technologies for Artificial Intelligence and Machine Learning Applications**
• **Stand-Alone and Embedded Static, Dynamic, non-Volatile and Emerging Memory Technologies**
• **CMOS Technology for Microprocessors and SoCs**
• **RF, Analog, Digital and Sensors Technologies**
• **New Process Technologies and Electronic Materials**
• **Advanced Packaging and System-in-Package (SiP) and 3D Technologies**
• **Photonics and Imaging Technologies**
• **Beyond CMOS Devices and Technologies for Heterogeneous Integration**

Focus Sessions

In addition to the topics mentioned above, the Symposium will highlight the following Focus Sessions:
• **MRAM future: Beyond STT (Technology)**
• **Silicon Photonics (Joint with Circuits)**
• **5G/mm-wave (Joint with Circuits)**
• **System/Design-Technology Co-Optimization (Joint with Circuits)**
• **Artificial Intelligence/Machine Learning (Joint with Circuits)**
• **Heterogeneous Integration (Joint with Circuits)**

Short Courses

Two full-day short courses will offer in-depth lectures on the following topics:
• **Future of Scaling for Logic and Memory (Technology)**
• **Technology and Circuits for Heterogeneous Systems (Joint with Circuits)**
• **Advanced Circuits Techniques (Circuits)**

Rump Sessions

All attendees are invited to join lively evening rump sessions on:
• **The Future of Memory (and what can logic learn from it?)**
• **40 years of VLSI to enable the Future of Computing**
• **Human vs. Machine: The Future Role of AI/Machine Learning in Circuit Design**

Symposia Demo Session

A demo session will be held during the Joint Circuits/Technology Reception on Monday, in which authors of selected papers will showcase posters and demonstration of their work.

Friday Forum

World-experts will share their perspectives on **Technologies and Circuits for Edge Intelligence** through invited lectures and panel discussions.

Best Student Paper Award

Best Student Paper Award selection will be based on quality and presentation of the paper at the Symposium. 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 apply for the award when submitting the paper.

Call for Sunday Workshops

The VLSI symposium also invites proposals for 2-3 hours-long workshops to be held on Sunday before the start of the conference. Contact Secretariat for VLSI symposia for submission details.

Paper Submission

Prospective authors must submit two-page abstracts using the Symposia'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.

Information and Registration

To obtain assistance with any aspect of the Symposium, please contact the appropriate Secretariat.
• *Secretariat for VLSI Symposia (America and Europe*): IEEE Meetings, Conferences & Events (MCE), Piscataway, NJ, USA, +1 732 465 6620, vlsisymposium@ieee.org
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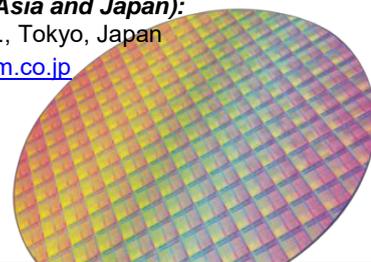Chorng-Ping_Chang
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Join the Symposia on VLSI Technology & Circuits LinkedIn Group