ASP-DAC 2019



22nd Asia and South Pacific Design Automation Conference

Date: January 21 – 24, 2019

Place: Miraikan, National Museum of Emerging Science and Innovation,

Koto-ku/Tokyo, Japan

Aims of the Conference

ASP-DAC is the largest conference in Asia and South-Pacific regions on Electronic Design Automation (EDA) area for VLSI and systems. ASP-DAC has been started at 1995 and this ASP-DAC 2019 is 24th conference. ASP-DAC 2019 offers you an ideal opportunity to touch the recent technologies and the future directions on the LSI design and design automation areas by technical papers and tutorials. ASP-DAC also holds Designers' Forum to make presentations about the latest designs for designers. Please do not miss ASP-DAC 2019.

Features of ASP-DAC 2019

■ Keynote Speeches

- 1. Jan. 22 (Tuesday): Zhang Tao, Tsinghua University, "The development trend of artificial intelligence technology and its application in the field of robotics"
- 2.Jan. 23 (Wednesday): Satoshi Matsuoka, RIKEN Center for Computational Science, " A Game-changing Supercomputer with Groundbreaking A64fx High Performance Arm Processor"
- 3.Jan. 24 (Thursday): Yasuhisa Shimazaki, Renesas Electronics Corporation, "Hardware and Software Security Technologies to Enable Future Connected Cars"

■ Tutorials

Half-day tutorial sessions will take place on Monday. Registered tutorial participants can attend any of the following 9 topics taught by world-class experts.

tutorial-1: Enablement of No-Human-in-the-Loop IC Design: Status and Directions

tutorial-2: Energy-Efficient Processing and Machine Learning at the Edge: from Sensing to Sensemaking

tutorial-3: Embedded Heterogeneous Computing: Architectural Landscape and Software Challenges

tutorial-4: Machine Learning in Test

tutorial-5: Recent Development and Future Perspective of Quantum Annealing tutorial-6: Integrating Hardware and Algorithm Advances for Cognitive System

tutorial-7: Smart Image Sensor Systems

tutorial-8: Design for Reliability in the Nano-CMOS Era: New Holistic Methodologies for Reliability Modeling and Optimization

tutorial-9: Machine Learning for Reliability of ICs and Systems

■ Designers' Forum

Designers' Forum is conceived as a unique program that shares the design experience and solutions of real product developments among LSI designers and EDA academia/developers. The topics discussed in this forum include Robotics, Imaging technologies and applications, Virtual Realty, and Emerging Technologies for Tokyo Olympic 2020.

■ University LSI Design Contest

In University LSI Design Contest, state-of-the-art LSI designs compete on their design excellence and implementation quality. 13 high-quality designs including actual silicon proof will be introduced at the short presentation and poster sessions.

■ Technical Sessions

There are 99 high quality papers selected from 292 submissions. We also plan the following special sessions: "Reverse Engineering: growing more mature – and facing powerful countermeasures", "Design, testing, and fault tolerance of Neuromorphic systems", "Modern Mask Optimization: From Shallow To Deep Learning", "Security of Machine Learning and Machine Learning for Security: Progress and Challenges for Secure, Machine Intelligent Mobile Systems", "The Resurgence of Reconfigurable Computing in the Post Moore Era"

Sponsored by: ACM SIGDA, IEEE CASS, IEEE CEDA, IEICE ESS, IPSJ SIG-SLDM

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Conference Secretariat

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