IEEE COMPUTER SOCIETY ANNUAL SYMPOSIUM ON VLSI

CALL FOR PAPERS

www.isvlsi.org

July 11-13, 2016
Pittsburgh, PA, USA

This Symposium explores emerging trends and novel ideas and concepts in the area of VLSI. The Symposium covers a range of topics: from VLSI circuits, systems and design methods to system level design and system-on-chip issues, to bringing VLSI experience to new areas and technologies. Future design methodologies as well as new CAD tools to support them will also be the key topics. *ISVLSI 2016 highlights a special theme of cyber-physical system.* Over almost two decades the Symposium has been a unique forum promoting multidisciplinary research and new visionary approaches in the area of VLSI. The Symposium is bringing together leading scientists and researchers from academia and industry. The papers from this symposium have been published as the special issue to top archival journals. This fact indicates a very high quality of the symposium papers, and we are determined to keep a strong emphasis on this critical aspect of any conference. The symposium proceedings are published by IEEE-CS conference publication services (CPS). The Symposium has established a reputation in bringing well-known international scientists as invited speakers, and this trend will continue.

Contributions are sought in the following areas

1) Analog and Mixed-Signal Circuits (AMS): Analog/mixed-signal circuits, RF and communication circuits, adaptive circuits, interconnects, VLSI aspects of sensor and sensor network.
2) Computer-Aided Design and Verification (CAD): Hardware/software co-design, logic and behavioral synthesis, simulation and formal verification, physical design, signal integrity, power and thermal analysis, statistical approaches.
3) Digital Circuits and FPGA based Designs (DCF): Digital circuits, chaos/neural/fuzzy-logic circuits, high-speed/low-power circuits, energy efficient circuits, near and sub-threshold circuits, memories, FPGA designs, FPGA based systems.
4) Emerging and Post-CMOS Technologies (EPT): Nanotechnology, molecular electronics, quantum devices, optical computing, spin-based computing, biologically-inspired computing, CNT, SET, RTD, QCA, reversible logic, and CAD tools for emerging technology devices and circuits.
5) System Design and Security (SDS): Structured and Custom Design methodologies, microprocessors/micro-architectures for performance and low power, embedded processors, analog/digital/mixed-signal systems, NoC, power and temperature aware designs, Hardware security, Cryptography, watermarking, and IP protection, TRNG and security oriented circuits, PUF circuits.
6) Testing, Reliability, and Fault-Tolerance (TRF): Analog/digital/mixed-signal testing, design for testability and reliability, online testing techniques, static and dynamic defect- and fault-recoverability, and variation-aware design.

The Symposium Program will include contributed papers and speakers invited by the Program Committee as well as a poster session. The keynotes, special sessions and Student Research Forum are planned as well. Authors are invited to submit full-length, original, unpublished papers. To enable blind review, the author list should be omitted from the main document.

Paper submission deadlines

Special Session Proposal Deadline: March 7, 2016
Paper Submission Deadline: March 7, 2016
Student Research Forum Submission Deadline: March 7, 2016
Acceptance Notification: April 22, 2016
Submission of Final Version: May 13, 2016

Authors of a selected top quality papers from ISVLSI 2016 depending on the technical scope will be invited to submit extended versions of these papers to Special Issues like "Nanoelectronic Devices and Circuits for Next Generation Sensing and Information Processing" in IEEE TNANO and "Circuit and System Design Automation for Internet of Things" in IEEE TCAD.

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