Call for Papers
ASP-DAC 2024
http://www.aspdac.com/
January 22-25, 2024
Songdo Conventia, Incheon, South Korea

Aims of the Conference:
ASP-DAC 2024 is the 29th annual international conference on VLSI design automation in Asia and South Pacific regions, one of the most active regions of design, CAD and fabrication of silicon chips in the world. The conference aims at providing the Asian and South Pacific CAD/DA and Design community with opportunities of presenting recent advances and with forums for future directions in technologies related to design and Electronic Design Automation (EDA). The format of the meeting intends to cultivate and promote an instructive and productive interchange of ideas among EDA researchers/designers, All scientists, engineers, and students who are interested in theoretical and practical aspects of VLSI design and design automation are welcomed to ASP-DAC.

ASP-DAC recognizes excellent contributions with the Best Paper Award and 10-Year Retrospective Most Influential Paper Award. Selected papers will be invited to submit the extended version of their work to a Special Issue of Integration, the VLSI Journal.

Areas of Interest:
Original papers in, but not limited to, the following areas are invited.

[1] System-Level Modeling and Design Methodology:  
1.1. HW/SW co-design, co-simulation, and co-verification  
1.2. System-level design exploration, synthesis, and optimization  
1.3. System-level formal verification  
1.4. System-level modeling, simulation, and validation  
1.5. Networks-on-chip and NoC-based system design

[2] Embedded, Cyberphysical (CSP), IoT Systems and Software:  
2.1. Many-core and multi-core SoC architecture  
2.2. IP/platform-based SoC design  
2.3. Domain-specific architecture  
2.4. Dependable runtime system  
2.5. Cyber physical system  
2.6. Internet of things  
2.7. Kernel, middleware, and virtual machine  
2.8. Compiler and toolchain  
2.9. Real-time system  
2.10. Resource allocation for heterogeneous computing platform  
2.11. Storage system and application  
2.12. Human-computer interface

[3] Memory Architecture and Near/In Memory Computing:  
3.1. Storage system and memory architecture  
3.2. On-chip memory architectures and management: Scratchpads, compiler, controlled memories, etc.  
3.3. Memory/storage hierarchies with emerging memory technologies  
3.4. Near memory and in-memory computing  
3.5. Memory architecture and management for emerging memory technologies

[4] Tools and Design Methods with and for Artificial Intelligence (AI)  
4.1. Design method for learning on a chip  
4.2. Deep neural network for EDA  
4.3. Tools and design methodologies for edge AI and TinyML  
4.4. Efficient ML training and inference

[5] Hardware Systems and Architectures for AI:  
5.1. Hardware, device, and architecture for deep neural networks  
5.2. Systems-level design for (deep) neural computing  
5.3. Neural network acceleration co-design techniques  
5.4. Novel reconfigurable architectures including FPGAs for AI/MLs

[6] Photonic/RF/Analog-Mixed Signal Design:  
6.1. Analog/mixed-signal/RF synthesis  
6.2. Analog design, verification, and simulation techniques  
6.3. High-frequency electromagnetic simulation of circuit  
6.4. Mixed-signal design consideration  
6.5. Communication and computing using photonics

[7] Approximate, Bio-Inspired and Neuromorphic Computing:  
7.1. Circuit and system techniques for approximate and stochastic computing  
7.2. Neuromorphic computing  
7.3. CAD for approximate and stochastic systems  
7.4. CAD for bio-inspired and neuromorphic systems

ASP-DAC does not allow double and/or parallel submissions of similar work to any other conferences, symposia, and journals. The submission must not include information that serves to identify the authors of the manuscript, such as name(s) or affiliation(s) of the author(s), anywhere in the manuscript, abstract, references and bibliographic citations. While research papers with open-source software are highly encouraged where the software will be made publicly available (via GitHub or similar), the authors' identities need to be anonymized in the submitted paper for the double-blind review process. Issuing the paper as a technical report, posting the paper on a website, or presenting the paper at a workshop that does not publish formally reviewed proceedings, does not disqualify it from appearing in the proceedings. Each paper shall be accompanied by at least one different conference registration at the speaker’s registration rate (e.g., two speaker registrations are needed for presenting two accepted papers). By any registered co-author can present the work at the conference. ACM and IEEE reserve the right to exclude a paper from distribution after the conference (e.g., removal from ACM Digital Library and IEEE Xplore) if the paper is not presented at the conference by any author.

Submission of Papers:
Deadline for abstract submission:  
Deadline for PDF uploading:  
Announcement of accepted manuscript IDs:  
Notification of acceptance:  
Deadline for final version:  
For detailed instructions for submission, please refer to the “Authors’ Guide” at: http://www.aspdac.com/

ASP-DAC 2024 Chairs
General Chair: Taehwan Kim (Seoul National University)
Technical Program Chair: Iris Hui-Ru Jiang (National Taiwan University)
Technical Program Vice Chairs: Yu Wang (Tsinghua University), Dongsu Jeon (Seoul National University)

Panels, Special Sessions, and Tutorials: Suggestions and proposals are welcome and have to be addressed to aspdac2024-sec@aspdac.com for special sessions & panels, aspdac2024-tutorial@aspdac.com for tutorials, no later than Aug 31 (Thu), 2023.

Contact: Conference Secretariat: aspdac2024-sec@aspdac.com  TPC Secretariat: aspdac2024-tpc@aspdac.com