



IEEE Council on Electronic Design Automation

Call for 2023 Award Nominations!

The IEEE Council on Electronic Design and Automation is soliciting nominations for its awards. To view the full detailed listing of each award please visit the [awards page](#) on our website. Nominators should utilize the forms associated with each award description on the website.

Nominations due 30 June 2023

Phil Kaufman Award for Distinguished Contributions to EDA
[Details](#) | [Nomination Form](#)

Phil Kaufman Hall of Fame
[Details](#) | [Nomination Form](#)

Visit the CEDA [website](#) to learn more about awards and to nominate a deserving colleague.

IEEE TCAD Donald O. Pederson Best Paper Award Winners Announced

The [IEEE Transactions on Computer-Aided Design Donald O. Pederson Best Paper Award](#) is sponsored by the IEEE Council on EDA and recognizes the best paper published in the Transactions on Computer-Aided Design of Integrated Circuits and Systems publication. The award is based on the overall quality, originality, level of contribution, subject matter, and the timeliness of the research. Anyone who is an author of a paper published in the Transactions on Computer-Aided Design of Integrated Circuits and Systems during the two calendar years preceding the award is eligible for nomination.

Congratulations to the authors— Xiaochen Peng, Shanshi Huang, Hongwu Jiang, Anni Lu, and Shimeng Yu— for the paper entitled “[DNN+NeuroSim V2.0: An End-to-End Benchmarking Framework for Compute-in-Memory Accelerators for On-Chip Training](#)”. The paper was published in the IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (Volume: 40, Issue: 11, November 2021). This award is presented annually at the Design Automation Conference (DAC).

Save the Date for DAC 2023

The [Design Automation Conference \(DAC\)](#) is recognized as the premier event for the design and design automation of electronic chips to systems. DAC offers outstanding training, education, exhibits, and superb networking opportunities for designers, researchers, tool developers, and vendors. The conference is sponsored by the DAC 2023 will be held on 9-13 July in San Francisco, CA. [Register now](#) to attend this event!

IEEE/ACM ICCAD 2023: Save the Date

The [ACM/IEEE International Conference on Computer-Aided Design \(ICCAD\)](#) will be held in San Francisco, CA on 29 October-2 November 2023. ICCAD is the premier forum to explore the new challenges, present leading edge innovation solutions, and identify emerging technologies in the Electronic Design Automation Research area. ICCAD covers a full-range of CAD topics – from device and circuit level up through system level, as well as post-CMOs design. ICCAD has a long-standing tradition of producing cutting-edge, innovative technical program for attendees. For more information, visit the [ICCAD website](#).

Fair and Intelligent Embedded Systems Challenge at ESWEEK 2023

[Embedded Systems Week \(ESWEEK\)](#) will be held on 17-22 September in Hamburg, Germany. ESWEK is the premier event covering all aspects of hardware and software design for intelligent and connected computing systems. By bringing together three leading conferences (CASES, CODES+ISSS, EMSOFT), two symposia (MEMOCODE, NOCS), and several workshops, tutorials, and education classes, ESWEK allows attendees to benefit from a wide range of topics covering the state of the art in embedded systems research and development.

Fairness competition track in the Tiny and Fair ML Design contest at ESWEK is a challenging, multi-month, research and development competition, focusing on real-world problems that require the implementation of machine learning algorithms on low-end microprocessors/microcontrollers. It is open to multi-person teams worldwide. The top three teams will be invited to ESWEK to present their solutions and to receive their awards.

Important Dates:

- Registration Deadline: 15 June 2023
- Submission Site Open: 1 July 2023
- Submission Site Close: 31 July, 2023
- Winner Announced: 15 August 2023

For more information, please visit the [website](#).

Call for Papers: ESL

The [IEEE Embedded Systems Letters](#) is now soliciting papers for their [Special Issue on Trends in Embedded Mechatronic Systems for Smart Manufacturing](#). As the manufacturing industry evolves, smart manufacturing quickly emerges as one of the most important trends to watch. This trend has been enabled by advances in technology that have allowed it to collect and analyze enormous amounts of data in real-time to make more informed decisions. Smart manufacturing is a method that uses a combination of automation, data exchange, and manufacturing

techniques to optimize production output. In this technology, the software that controls production lines, the sensors that monitor equipment or products, and the computers used to manage operations are integrated into a single operational platform via common networks.

Important Dates:

- Submission deadline: 20 August 2023
- Notification to authors: 10 October 2023

For more information regarding this special issue, [download](#) the Call for Papers.

Call for Papers: D&T

The [IEEE Design&Test](#) is now soliciting papers for their [Special Issue on Approximate Test](#). In this special issue, IEEE Design&Test will solicit papers from various academic, research, and industry groups on how best to apply “approximate” test methods to meet the objectives listed above. These papers will provide insight and justification into why the approximate test is perhaps the best answer to test all functions implemented in silicon, i.e. data and signal manipulation and transmission in analog / mixed-signal and digital circuits, under controlled power, external interface-driven, and application use case conditions.

Important Dates:

- Submission deadline: 7 August 2023
- Notification First Round: 23 October 2023
- Revision Submission: 11 December 2023
- Final decision: 29 January 2024
- Tentative publication Spring 2024

Download the Call for Papers [here](#).

Call for Papers: JxCDC

The [IEEE Journal on Exploratory Solid-State Computational Devices and Circuits](#) is now soliciting papers for their [Special Issue on Steep Slope Transistors for Energy-Efficient Computing & More](#).

Tunnel field-effect transistors (FETs) and low-subthreshold-swing steep-slope (SS) transistors hold promise to outperform complementary metal-oxide semiconductor technology (CMOS) at low voltage and realize more energy-efficient logic for computation. The aim of this special topics issue is to highlight experimental advances and ideas that make SS transistors attractive for integration with CMOS to realize better power-performance logic. Aspirational characteristics for n- and p-type steep transistors can be summarized as follows: drain currents exceeding 200 $\mu\text{A}/\mu\text{m}$ at a supply voltage below 0.4 V, with SS less than 60 mV/decade beginning near 1 $\mu\text{A}/\mu\text{m}$ and

spanning more than 4 decades. Papers describing the theory and modeling of transistors that can meet and surpass these goals are of interest, as are papers that assess the full design stack from devices to circuits and architecture to applications to identify system bottlenecks and inform technology development for computing, communications, or other applications. Materials approaches are not restricted to silicon CMOS and can be based on any semiconductor technology and incorporate multiferroic or other performance boosters. New approaches based on three-dimensional integration, heterogeneous integration, processing, or insights from manufacturing are also within the scope of this issue to advance understanding and progress in SS transistors.

Important Dates:

- Submission deadline: 1 September 2023
- First Notification: 1 October 2023
- Revision Submission: 15 October 2023
- Final decision: 15 November 2023

For more information, download the Call for Papers [here](#).



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