

NeuroCore

2027 MCSoC-NeuroCore Global Summit

on Neuromorphic Systems and Brain-Inspired Computing

20th ANNIVERSARY

Hosted within the 20th IEEE MCSoC 2027 | May 10–13, 2027 | Tokyo, Japan

The 2027 MCSoC–NeuroCore Global Summit is a dedicated venue for advancing neuromorphic systems and brain-inspired computing. It brings together leading researchers and practitioners to explore the principles, architectures, and technologies that enable intelligent computation grounded in neural and cognitive models: from devices and circuits to architectures, algorithms, and large-scale systems that emulate the efficiency, adaptability, and parallelism of biological intelligence, for scalable, energy-efficient, and robust real-world deployment.

Topics of Interest

- **Track 1** Brain-Inspired and Neuromorphic System Architectures
- **Track 2** In-Memory and Event-Driven Computing Architectures
- **Track 3** Architectures for Large-Scale Spiking Neural Systems
- **Track 4** Neuromorphic Intelligence: Circuits, Systems, and Architectures
- **Track 5** Analog, Mixed-Signal, and Memristive Neuromorphic Systems
- **Track 6** Neuromorphic Approaches for Foundation Models and On-Device AI
- **Track 7** Simulation, Benchmarking, and Evaluation of Neuromorphic Systems
- **Track 8** Energy-Efficient Neuromorphic Accelerators for Edge and Cloud
- **Track 9** Brain-Inspired Algorithm–Hardware Co-Optimization
- **Track 10** Neuromorphic On-Device Learning and Edge Adaptation
- **Track 11** Materials and Devices for Ultra-Low-Power Neuromorphic Systems
- **Track 12** Neuromorphic Software Stacks, Compilers, and Programming Models
- **Track 13** Cognitive Computing Models and Brain-Derived Algorithms
- **Track 14** Brain-Inspired Hardware for Cognitive and Adaptive Systems
- **Track 15** Novel Devices for Neuromorphic Computing: Memristors, PCM, RRAM
- **Track 16** 3D Integrated and Heterogeneous Neuromorphic Systems

Track chairs and detailed topics: please see the summit website.

Summit Chairs

SUMMIT CHAIR
Amirreza Yousefzadeh
University of Twente, The Netherlands

SUMMIT CHAIR
Xabier Iturbe
IKERLAN Research Center, Spain

SUMMIT CHAIR
Alberto Marchisio
University of Southern Denmark (SDU), Denmark

Important Dates (Round 1)

Paper Submission
December 31, 2026

Notification
January 31, 2027

Camera-Ready & Registration
February 10, 2027

Why Participate in NeuroCore?

Keynote Talks
Insights from leading experts in academia and industry.

Global Community
Connect with researchers and industry leaders worldwide.

IEEE Proceedings
Regular and short papers published in IEEE Xplore.

20th Anniversary
Celebrate two decades of the MCSoC Forum in Tokyo.

Paper Submission

Submit via EDAS, selecting the **NeuroCore** track:
https://edas.info/N35724

Proceedings published in IEEE Xplore and indexed by Scopus.

Scan for tracks, chairs, and full details
mcsoc-forum.org/2027/index.php/neurocore/

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