

EmbodiCore
Embodied AI & Distributed Autonomous Systems

2027 MCSoC-EmbodiCore Global Summit

on Embodied AI and Distributed Autonomous Systems

20th ANNIVERSARY

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

The 2027 MCSoC–EmbodiCore Global Summit is a dedicated venue for advancing next-generation embodied AI and distributed autonomous systems. It focuses on the physical realization of intelligence through real-time multicore architectures, neuromorphic acceleration, embedded AI, and distributed computing frameworks, building a rigorous foundation for autonomous agents that perceive, reason, and act through tightly integrated hardware–software systems, and that operate collaboratively, safely, and effectively in complex, large-scale environments.

Topics of Interest

Track 1 Distributed & Collective Embodied Intelligence

Track 2 Embodied AI for Critical Missions

Track 3 Computing Architectures for Embodied Intelligence

Track 4 Real-Time Control & System Design

Track 5 Bio-Inspired Actuation & Soft Embodiment

Track 6 Agentic AI & Autonomous Reasoning

Track 7 Industrial Embodied Systems & Human Augmentation

Track 8 Simulation, Digital Twins, and Sim-to-Real Transfer

Track 9 Ethics, Security, and Trustworthy Embodied AI

Track 10 Cognitive and Social Embodiment

Track 11 Advanced Materials and Structural Integration

Track 12 Benchmarking, Standards, and Open-Source Platforms

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

Summit Chairs

SUMMIT CHAIR

Mohamad Sawan
Westlake University, China

Important Dates (Round 1)

Paper Submission
December 31, 2026

Notification
January 31, 2027

Camera-Ready & Registration
February 10, 2027

Paper Submission

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

Proceedings published in IEEE Xplore and indexed by Scopus.

Why Participate in EmbodiCore?

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.

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

Scopus Indexed

IEEE Xplore

Patron, Host, and Sponsorships

GIATEC — ADVANCED INFORMATICS TECHNOLOGY

MULTICORE/MANY-CORE SYSTEMS-ON-CHIP

UEC TOKYO

THE UNIVERSITY OF AIZU — To Advance Knowledge for Humanity — 1993

Adaptive Systems Lab.

IEEE COMPUTER SOCIETY

80th ANNIVERSARY CELEBRATION

IEEE TCMM — Technical Committee on Microprocessors and Microcomputers