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IEEE CASS FLAGSHIP CONFERENCES COLOCATED FOR THE FIRST TIME

SAVE THE DATE

# AICAS & APCCAS

## September 20–24, 2027

Midtown Shangri-La · Hangzhou, China

**Call for Papers**



### Where Silicon Meets Intelligence

For the first time, two flagship conferences of the IEEE Circuits and Systems Society meet in one place: IEEE AICAS 2027 and IEEE APCCAS 2027, co-located at the Midtown Shangri-La, Hangzhou, China, from 20 to 24 September 2027.

AI is moving from data centres into machines that sense, decide and act. That shift depends on every layer of circuits and systems, from the analog front end to the accelerator, from the power supply to the sensor. AICAS and APCCAS bring those layers into the same room.

Authors submit to one of the two conferences. Every registered participant joins both communities through shared keynotes, shared tutorials and a joint banquet. Hangzhou, home to a fast-growing AI and robotics ecosystem, is the natural place for this meeting of silicon and intelligence.

## AICAS 2027 — Embodied and Agentic AI: From Silicon to Action

The next generation of AI will not only answer: it will perceive, plan and act, in robots, vehicles, wearables and autonomous agents. AICAS 2027 invites contributions on the circuits and systems that make this possible, under tight limits of energy, latency, memory and safety.

**Topics include, but are not limited to:**

- Hardware for embodied AI: perception, sensor fusion, motion control and robotics processors
- Accelerators for agentic AI, large language models and multimodal foundation models
- Computing-in-memory, near-memory and processing-in-sensor architectures
- Emerging devices for AI: spintronic, resistive, ferroelectric, phase-change and photonic
- Neuromorphic and spiking circuits and systems
- Edge and on-device AI: low-power inference, on-chip learning and continual learning
- Hardware–software co-design, compilers and AI for EDA
- Chiplets, 3D integration and memory systems for AI
- Trustworthy, secure and reliable AI hardware
- AI circuits and systems for healthcare, mobility, manufacturing and smart cities

## APCCAS 2027 — Bridging Circuit Foundations and Intelligent Futures

Every intelligent system still rests on solid circuit design: precise analog front ends, efficient power conversion, robust RF links and reliable digital logic. APCCAS 2027 celebrates these foundations and invites work that carries them toward the intelligent systems of tomorrow, across the whole Asia-Pacific community and beyond.

**Topics include, but are not limited to:**

- Artificial intelligence circuits, systems and applications
- Digital integrated circuits and systems
- Analog and mixed-signal circuits and systems
- Power and energy circuits and systems
- Biomedical circuits and systems
- Sensory circuits and systems
- RF and communications circuits and systems
- Beyond CMOS: nanoelectronics and hybrid systems integration
- Neural and nonlinear circuits and systems

Papers that connect classical circuit techniques with intelligent applications are especially welcome.

# AICAS & APCCAS

**September 20–24, 2027**
Midtown Shangri-La · Hangzhou, China

## One Venue, Two Communities

The co-location gives every participant access to a program larger than either conference alone.

**Shared keynotes**
by leaders from academia and industry on the convergence of circuits and intelligence

**Shared tutorials**
open to both communities, from foundational design to frontier AI hardware

**Joint banquet**
to meet colleagues across the AICAS and APCCAS communities

**Special sessions**
on cross-cutting topics; proposals are welcomed

**Student, women and young-professional activities**
including awards and networking events

**Industry exhibition and demonstrations**
showcasing AI and circuit innovation

## Submission and Important Dates

Authors are invited to submit original, unpublished work to either AICAS 2027 or APCCAS 2027, selecting the relevant topic at submission. Accepted and presented papers will be submitted for inclusion in IEEE Xplore, subject to IEEE quality requirements.

### AICAS 2027

- **Paper Format**: Maximum 5 pages including references, IEEE two-column format
- **Submission System**: https://easychair.org/conferences/?conf=aicas2027
- **Review**: Double-blind
- At least one author per paper must **register** and **present** in person

| Special session and tutorial proposals | Paper submission deadline |
|---|---|
| March 10, 2027 | April 13, 2027 |
| **Notification of acceptance** | **Final paper and author registration** |
| June 13, 2027 | July 23, 2027 |

### APCCAS 2027

- **Paper Format**: Maximum 5 pages including references, IEEE two-column format
- **Submission System**: https://easychair.org/conferences/?conf=apccas2027
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|---|---|
| March 10, 2027 | April 27, 2027 |
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| June 27, 2027 | August 06, 2027 |

## Venue, Organizers and Contact

The conferences take place at the Midtown Shangri-La, Hangzhou. Hangzhou combines the beauty of West Lake, a UNESCO World Heritage site, with one of China's most dynamic technology and innovation hubs.

- **Sponsored by: IEEE Circuits and Systems Society**
- **Technically sponsored by: Beihang University, Hangzhou International Innovation Institute**
- **General Chairs: Amara Amara and Weisheng Zhao**


**AICAS 2027 Official Contact**

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**We look forward to welcoming you to Hangzhou, where silicon meets intelligence.**