

Call for Contributions

Note: On-site and Virtual Options

To accommodate many situations, we are offering the option for either physical presence or virtual participation. We would be delighted if all authors managed to attend in person but are aware that special circumstances are best handled by having flexible options.

Submission:

1. Inform the Chair about the Title of your Contribution

2. Submission URL:

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=AICT+2026+Special>

Please select Track Preference as **NGUAV**

Special track

NGUAV: Next-Generation UAV Networking

Chair

Assoc. Prof. Dr. A. F. M. Shahan Shah, Yildiz Technical University, Istanbul, Turkey
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along with

AICT 2026, The Twenty-Second Advanced International Conference on Telecommunications

April 19 - 23, 2026 - Lisbon, Portugal

<https://www.iaria.org/conferences2026/AICT26.html>

The evolution of autonomous UAVs as critical nodes in next-generation wireless networks presents both challenges and opportunities.

Integrating AI, cooperative MAC design, and Massive MIMO technologies allows UAV networks to meet demanding requirements for latency, energy efficiency, and reliability, particularly in dynamic and heterogeneous 5G/6G environments.

Furthermore, UAV–satellite integration promises to extend the reach of terrestrial communication infrastructures, supporting global connectivity, disaster management, and smart logistics.

NGUAV focuses on advancing the design, optimization, and intelligence of next-generation UAV communication networks within the context of 5G, Beyond-5G (B5G), and 6G technologies. The emphasis is on AI-driven hybrid MAC protocol design, cluster-based cooperative architectures, and Massive MIMO integration for reliable, scalable, and energy-efficient aerial communications.

By incorporating satellite–UAV integration, the track also aims to foster research on space-air-ground integrated networks (SAGINs) that enable global, seamless, and resilient connectivity.

NGUAV will provide a multidisciplinary platform for academia, industry, and government researchers to present innovations, share experiences, and discuss the roadmap toward intelligent, integrated, and autonomous aerial networks.

Subtopics for contributions include, but are not limited to:

- AI-driven hybrid MAC protocols for UAV communications
- Cluster-based cooperative networking for UAV swarms
- Massive MIMO and beamforming optimization in UAV networks
- UAV–satellite integration and space–air–ground network design
- Intelligent resource allocation and spectrum management
- Machine learning and reinforcement learning for UAV MAC optimization
- Network slicing and QoS management for UAV communication systems
- Energy-efficient and green communication protocols for aerial networks
- Edge intelligence and federated learning for UAV operations
- UAV-assisted IoT and smart city communications
- UAV-assisted networks for disaster management and recovery
- Reliability, latency reduction, and security mechanisms for aerial communications
- Experimental testbeds, simulations, and real-world performance evaluation of UAV systems

These are only suggestions; we welcome papers discussing other issues related to smart sensing

Important Datelines

Inform the Chair as soon as you decide to contribute.

Submission: Feb 28

Notification: Mar 20

Registration: Apr 2

Camera-ready: Apr 2

Note: *The submission deadline is somewhat flexible, providing arrangements are made ahead of time with the chair.*

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaria.org]
- Presentations: slide only [slide-deck posted on www.iaria.org]
- Demos: two pages [posted on www.iaria.org]

Paper Format

- See: <http://www.iaria.org/format.html>
- Before submission, please check and comply with the editorial rules: <http://www.iaria.org/editorialrules.html>

Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.iariajournals.org>
- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>
- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

Papers Submission

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=AICT+2026+Special>

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Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.

- Registration fees are available at <http://www.iaria.org/registration.html>

Contacts

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