SoftCOM 2026

17-19 September 2026 / Split, Croatia

Symposium on: AI-Enabled UVs/UAVs for On-Demand Edge Intelligence

Symposium Organizer: Giovanni Giambene
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Call for Papers

Symposium on "AI-Enabled UVs/UAVs for On-Demand Edge Intelligence" will be held in the frame of the 34th International Conference on Software, Telecommunications and Computer Networks (*SoftCOM 2026*), co-organized by the University of Split, FESB and Croatian Communications and Information Society (CCIS) and technically co-sponsored by the IEEE Communications Society (ComSoc), on September 17 - 19, 2026 in Split, Croatia.

SYMPOSIUM DESCRIPTION - This session explores how AI-enabled ground Unmanned Vehicles (UVs) and Unmanned Aerial Vehicles (UAVs) are emerging as flexible, mobile edge platforms that deliver on-demand intelligent services in scenarios where fixed infrastructure is unavailable, insufficient, or too costly to deploy. By combining onboard sensing, edge computing, and wireless connectivity, smart UVs/UAVs can collect, process, and interpret data directly in the field, enabling low-latency decision-making and context-aware services across a wide range of applications. Unlike traditional edge or cloud systems, UV/UAV platforms operate under strict constraints in payload, energy, endurance, and computing resources. These constraints require novel AI and system design approaches, including lightweight models, split and distributed learning, onboard preprocessing, cooperative multi-UV/UAV inference, adaptive task offloading, and energy-aware AI pipelines. At the same time, the mobility of UVs/UAVs offers a unique advantage: intelligence can be physically moved where and when it is needed, enabling rapid, situational deployment of edge analytics and AI services. Various use cases and scenarios can be considered, such as environmental monitoring, smart agriculture, animal tracking, emergency management, and IoT data collection and onboard processing.

Paper length should be max 6 pages in two-column IEEE format. One additional page is allowed with an additional charge at the time of registration and final paper submission.

Accepted and presented papers will be published in the conference proceedings and submitted to IEEE Xplore as well as other Abstracting and Indexing (A&I) databases. Authors of selected papers will be invited to submit an extended version of their manuscripts for publication in a special issue of the Journal of Communications Software and Systems (JCOMSS).

We cordially invite speakers who wish to present original papers on the aforementioned topics, including but not limited to:

- Smart UV/UAV applications to smart agriculture and precision farming
- IoT data collection and in-situ processing via UVs/UAVs
- Multimodal sensing and mapping
- UV/UAV-assisted digital twins and augmented situational awareness
- Distributed learning over networks
- 5G/6G radio coverage extension
- Emergency and disaster-response operations
- Outcomes from experiments in the field with UVs/UAVs

International Symposium Committee

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IMPORTANT DATES	
Final manuscript due	**April 20, 2026**
Notification of acceptance	**May 30, 2026**
Camera-ready manuscript	**June 25, 2026**

JOURNAL OF COMMUNICATIONS SOFTWARE AND SYSTEMS
https://jcoms.fesb.unist.hr/

More information about the Conference including details on the submission process and authors kit is available on the website:

https://2026.softcom.fesb.unist.hr/

Conference Operation Support: Katarina Babić, University of Split, Croatia (softcom@fesb.hr)