



an Open Access Journal by MDPI

AI-Powered Energy-Efficient UAV Communications

Guest Editors:

Dr. Sherief Hashima

Computational learning theory team, RIKEN-Advanced Intelligence Center, Fukuoka 819-0395 Japan

Dr. Mostafa Fouda

Department of Electrical and Computer Engineering, Idaho State University, Pocatello, ID 83209, USA

Deadline for manuscript submissions: closed (31 December 2023)

Message from the Guest Editors

The efficient use of energy is critical for the successful deployment and operation of unmanned aerial vehicles (UAVs) in а varietv of applications, including surveillance, communication networks. and transportation. The increasing demand for UAVs in different industries such as agriculture, logistics, and emergency response has led to the development of more advanced and sophisticated UAVs. However, the limited on-board energy resources of UAVs pose a significant challenge for their long-term operation and endurance. Additionally, machine learning and AI can enable UAVs to make more informed and intelligent decisions regarding their operations, leading to more energy-efficient and sustainable UAV deployment. Furthermore, the integration of recent technologies like reconfigurable intelligent surface (RIS), non-orthogonal multiple access (NOMA), satellites, etc. with UAVs empowers their application areas and future directions.



mdpi.com/si/159284







an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Diego González-Aguilera

Cartographic and Land Engineering Department, Higher Polytechnic School of Avila, University of Salamanca, Hornos Caleros, 50, 05003 Avila, Spain

Message from the Editor-in-Chief

Drones is the only international open-access journal about the science, policy and technology of drones and its applications. Nowadays, the proliferation of drones is a reality for local policy makers, regulatory bodies, mapping authorities, startups and consolidated companies. There are many uses and benefits of drones: from the emergence of new sensors and the evolution of new platforms; to the development of specific software and the emergence of new applications. *Drones* publishes reviews, regular research papers, communications and short notes, without restriction on the length of papers. *Drones* seeks to provide a central forum for scholars engaged in drones' research and applications.

There is a need for high quality papers in this area and the *Drones* Editorial Board are widely recognized international leaders. *Drones* journal guarantees a serious peer review and a rapid publication across the whole discipline of drones.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High visibility: indexed within Scopus, SCIE (Web of Science), Inspec,

and other databases.

Journal Rank: JCR - Q2 (Remote Sensing) / CiteScore - Q1 (Aerospace Engineering)

Contact Us

Drones Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/drones drones@mdpi.com X@Drones_MDPI