# **Special Issue**

# Advances in Deep Learning for Drones and Its Applications: 2nd Edition

## Message from the Guest Editors

Papers are solicited on all areas directly related to these topics, including the following:

- Large-scale aerial datasets and standardized benchmarks for the training, testing, and evaluation of deep learning solutions;
- Deep neural networks (DNN) for field aerial robot perception (e.g., object detection or semantic classification for navigation);
- Recurrent networks for state estimation and dynamic identification of aerial vehicles;
- Deep reinforcement learning for aerial robots (discrete or continuous control) in dynamic environments;
- Learning-based aerial manipulation and planning in cluttered environments;
- Decision making or task planning using machine learning for field aerial robots;
- Data analytics and real-time decision making with aerial robots-in-the-loop;
- Aerial robots in agriculture using deep learning;
- Aerial robots in inspection using deep learning;
- Imitation learning for aerial robots (e.g., teach and repeat);
- Multi aerial-agent coordination using deep learning;
- Innovative and novel mechanical and electrical design for aerial vehicles.

#### **Guest Editors**

Dr. Inkyu Sa

Tencent XR Vision Lab, Canberra, ACT 2601, Australia

Dr. Marija Popovic

Faculty of Aerospace Engineering, Delft University of Technology, 2600 AA Delft, The Netherlands

Dr. Ho Seok Ahn

Centre for Automation and Robotic Engineering Science, Department of Electrical and Computer Engineering, University of Auckland, Auckland. New Zealand

### Deadline for manuscript submissions

25 August 2025



## **Drones**

an Open Access Journal by MDPI

Impact Factor 4.8 CiteScore 7.4



mdpi.com/si/213488

Drones
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
drones@mdpi.com

mdpi.com/journal/drones





## **Drones**

an Open Access Journal by MDPI

Impact Factor 4.8 CiteScore 7.4





## **About the Journal**

### 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.

#### 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

### **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, Ei Compendex and other databases.

### Journal Rank:

JCR - Q1 (Remote Sensing) / CiteScore - Q1 (Aerospace Engineering)