Special Issue

Advances in Deep Learning for Drones and Its Applications

Message from the Guest Editors

Drones, especially vertical takeoff and landing (VTOL) platforms, are extremely popular and useful for many tasks. Within this context, we thus invite papers focusing on current advances in the area of deep learning for field aerial robots for submission to this Special Issue. Papers are solicited on all areas directly related to these topics, including but not limited to 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
- 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 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

Guest Editors

Dr. Marija Popović

Cluster of Excellence "PhenoRob", Rheinische Friedrich-Wilhelms-Universität Bonn, Niebuhrstraße 1a, 53113 Bonn, Germany

Dr. Inkyu Sa

Tencent XR Vision Lab, Canberra, ACT 2601, Australia

Deadline for manuscript submissions

closed (31 March 2023)

Drones

an Open Access Journal by MDPI

Impact Factor 4.8
CiteScore 7.4

mdpi.com/si/88638

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

mdpi.com/journal/drones

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)