

## Special Issue

# Advanced Navigation, Control and Application of Unmanned Aerial Vehicles

### Message from the Guest Editor

Unmanned aerial vehicles (UAVs), also known as drones, have emerged as a versatile and transformative technology with a wide range of applications spanning various fields, including the military, civilian, environmental, agricultural, and industrial sectors. Over the past few decades, significant progress has been made in the development of UAVs, leading to increasingly sophisticated systems capable of autonomous flight, navigation, and versatile applications. This Special Issue aims to explore the latest developments in advanced navigation and control techniques for UAVs and their diverse applications. The research presented here will delve into novel algorithms and methodologies that contribute to precise localization, obstacle avoidance, path planning, and cooperative navigation of UAV swarms. Moreover, this Special Issue will shed light on the integration emerging technologies, such as 5G networks, edge computing, and Internet of Things (IoT) platforms, into UAVs, further expanding their capabilities and potential applications.

### Guest Editor

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### Deadline for manuscript submissions

closed (31 October 2024)



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## About the Journal

### Message from the Editor-in-Chief

*Machines* is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided. There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

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Prof. Dr. Antonio J. Marques Cardoso  
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