Special Issue

Intelligent Control Techniques for Unmanned Aerial Vehicles

Message from the Guest Editors

The objective of this Special Issue is to explore the latest advancements in intelligent control techniques for UAVs, with an emphasis on algorithms, architectures, and applications that enhance the autonomy, reliability, and robustness of UAV systems. This Special Issue invites original research articles that contribute significantly to theoretical, numerical, and experimental developments in UAV control, as well as application-driven innovations. Review articles highlighting the state-of-the-art in UAV intelligent control are also encouraged. Potential topics include, but are not limited to, the following:

- Adaptive control techniques for UAVs;
- Fuzzy logic and hybrid control systems;
- Reinforcement learning and deep learning for autonomous UAVs;
- Path planning and trajectory optimization;
- Real-time decision-making algorithms;
- Robust control for uncertain and dynamic environments;
- UAV swarm intelligence and multi-agent systems;
- Fault detection and diagnosis in UAV systems;
- Sensor fusion and perception for autonomous flight;
- Vision-based control for obstacle avoidance and navigation;
- Safety and reliability analysis in UAV systems;

Guest Editors

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Deadline for manuscript submissions

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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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