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Call for Papers

Special Issue on

Security and Safety in Unmanned Systems

Guest Editors:

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Background

Unmanned systems are machines or devices that are equipped with necessary data processing units, sensors, control, communication and computation systems, including unmanned aircraft, ground mobile robots/vehicles, surface/underwater vehicles, satellites, and other unconventional structures. Since the first flight of an unmanned aircraft in 1916, unmanned systems have attracted a lot of attention and have been applied to numerous fields with various functions and different uses thanks to the capability of performing missions autonomously without human intervention. Simultaneously, the development of unmanned system technology is associated with vulnerabilities and threats, and the widespread application process is accompanied by a number of issues and accidents, which pose challenges for industry, academia, and government.

Aims and Scope of the Special Issue

As the world's first innovative journal focusing on the intersection of cyber security and functional safety, *Security and Safety* (S&S) hereby calls for papers to this special issue “*Security and Safety in Unmanned Systems*”. The purpose is to provide a venue for new contributions on security and safety in unmanned systems, including theoretical studies, practical applications and related new techniques. All submitted papers will be reviewed by the editor and sent to at least three independent referees for single-blind peer review and selected on the basis of both their quality and their relevance to the theme of this special issue.

This special issue welcome papers on topics that include but are not limited to:

- Attack modeling for unmanned systems
- Attack detection for unmanned systems
- Vulnerability analysis for unmanned systems
- Data security and privacy for unmanned systems
- Model-based and/or data-driven secure state estimation for unmanned systems
- Robust control of unmanned systems accounting for inherent uncertainties
- Resilient control of unmanned systems under external attacks
- Distributed robust/resilient control of networked unmanned systems
- AI-based security algorithms and mechanisms for unmanned systems
- Experimental evaluation for security and safety of unmanned systems

Submissions

Authors should submit their manuscripts online directly at: <https://sands.nestor-edp.org> and choose, during submission, the special issue: **Security and Safety in Unmanned Systems**. All relevant papers will be carefully considered and peer-reviewed by a distinguished team of international experts. The instructions for authors are detailed at: <https://sands.edpsciences.org/author-information/instructions-for-authors>.

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Article Processing Charges - S&S is an Open Access journal and no APCs in 2022 and 2023.

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