Special Issue

Automation in Mechatronic and Robotic Systems-Advanced Perception, Planning and Control

Message from the Guest Editors

The aim of the Special Issue is to present recent advances in the control of unmanned aerial and mobile robotic systems and missile control and guidance, as well as to provide an open space for discussion on the methods used in the modeling, analysis, and synthesis of control systems, autopilot design, and sensor systems, including advanced perception solutions. Contributions submitted to this Special Issue can be dedicated to the theory of robotic systems in the analysis and design of existing and new constructions of control and perception systems and their industrial applications. They may also cover recent developments in mechatronic and robotic systems and their constrained control methods with advanced sensors. Research areas may include (but not limited to) the following:

- Modern control theory and methods;
- The modelling of unmanned systems;
- Modern mobile and aerial robotics:
- Unmanned aerial vehicles;
- Unmanned ground vehicles;
- Aircraft and flight systems design;
- Missile modelling, control, and guidance;
- Autopilot design:
- Formations and swarms:
- Sensors and perception systems;
- The psychological effects on operators of unmanned systems.

Guest Editors

Dr. Slawomir Jan Stepien

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Dr. Wojciech Giernacki

Prof. Dr. Dariusz Horla

Deadline for manuscript submissions

closed (20 July 2025)



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About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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