Special Issue

Symmetry/Asymmetry in Control Science

Message from the Guest Editors

We are pleased to announce the upcoming Special Issue on "Symmetry/Asymmetry in Control Science". This Issue aims to explore how symmetry and asymmetry influence control science in the domain of robotics, such as Unmanned Aerial Vehicles (UAVs). Unmanned Ground Vehicles (UGVs), Unmanned Surface Vessels (USVs), Autonomous Surface Vehicles (ASVs), Unmanned Underwater Vehicles (UUVs), Space Exploration Vehicles (SEVs), Lunar Roving Vehicles, and Mars rovers. By reading this Special Issue, researchers and readers will gain insights into the development of novel control techniques, especially on how to enable more efficient, adaptable, and reliable robotic systems across domains such as aerial, ground, surface, underwater, space exploration, and lunar and planetary exploration. By addressing the challenges posed by asymmetries and harnessing the benefits of symmetries, we can unlock new possibilities and advancements in navigation, path planning, control, guidance, Simultaneous Localization and Mapping (SLAM), and other control techniques...

Guest Editors

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About the Journal

Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

Editor-in-Chief

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