Special Issue

Navigation and Perception for Mobile Robots

Message from the Guest Editors

Mobile robots have become increasingly essential across a wide range of applications, from industrial automation to autonomous vehicles and personal assistants. A key factor in their success is their ability to navigate and perceive their environment effectively. This Special Issue explores the latest developments in navigation and perception for mobile robots. Navigation focuses on the algorithms and systems that enable robots to move efficiently and safely through dynamic environments, while perception involves the technologies that allow robots to interpret and understand the world around them.

Recent advances have significantly improved robots' capabilities in tasks such as simultaneous localization and mapping (SLAM), obstacle avoidance, and path planning, even in complex, uncertain environments. New sensor technologies, including LiDAR, cameras, and radar, have contributed to more precise and reliable perception.

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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.

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