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Advances in Perception, Decision Making and Controls for Autonomous Navigation Using Mobile Robots

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Deadline for manuscript submissions:
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Message from the Guest Editors

In recent years, autonomous navigation that uses mobile robots and onboard visual/LiDAR/inertial sensors has become increasingly popular for different applications. Their rapid development has an important effect on the environment, transportation, manufacturing, and other industries. The aim of this Special Issue is to collect papers on recent advances and challenges in perception, decision making, and controls for autonomous navigation using mobile robots.

Areas to be covered in this Special Issue may include, but are not limited to:

- Autonomous mobile robots;
- Robot learning;
- Multi-robot controls;
- Autonomous navigation;
- Human–autonomy coordination;
- Automated driving systems;
- Motion planning for mobile robots;
- Visual-inertial navigation;
- LiDAR-based navigation;
- Cooperative intelligent transportation systems;
- Integrated path planning and tracking.

Keywords: autonomous mobile robots; autonomous navigation; multi-robot control; machine vision; learning-based motion planning; distributed control and estimation

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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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