# Special Issue

# Motion Planning for Autonomous and Intelligent Mobile Robots in Unstructured Environments

## Message from the Guest Editor

The robotics industry has experienced revolutionary growth in the past decade, and robots have transitioned from structured factory settings to unstructured environments. In particular, mobile robots have found extensive applications in elderly care, warehouse automation, patrolling and surveillance, and space exploration, as well as search and rescue operations. To succeed in these important fields, the development of motion-planning techniques is vital. Unlike path planning in the traditional automation industry, which can be hardcoded, motion planning for autonomous mobile robots, including both UGVs and UAVs, need take the surrounding environment into consideration. This Special Issue aims to showcase recent advances related to motion planning autonomous and intelligent mobile robots in unstructured environments. Topics of interest include, but are not limited to, the following:

- Path planning of UGVs in dynamic or unstructured environments;
- Obstacle avoidance of mobile robots;
- Motion planning drones and UAVs with collision avoidance;
- Sensor-based motion control of UGVs and UAVs;
- Mission planning for drones or UAVs;
- Implementation of path-planning techniques to new robot systems.

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