Special Issue on:
Autonomous Systems: Navigation, Learning and Control

Autonomous systems are one of the most important representatives of Artificial Intelligence technologies, which combine mechanical and electronic hardware, operating software, low level dynamic control as well as high level intelligent decision components, to address challenges which demand high level autonomy and machine intelligence. Autonomous systems such as aerial robotics, ground vehicles, unmanned surface vehicles and even all-terrain vehicles for aerospace applications, etc. have played an important role in many aspects. For example, during the COVID-19 pandemic, autonomous systems have been used for disinfection and food delivery in order to reduce infection risks.

The IET Cyber-systems & Robotics has a strong interest in reporting the rapid progress of autonomy technologies arising in autonomous systems, such as onboard computing platform, smart sensing, multi-information computing & processing, autonomous navigation, learning control & decision, multi-agent communication & coordination, etc.

Therefore, the IET Cyber-systems & Robotics is going to launch a dedicated special issue on Autonomous Systems: navigation, learning and control, to create a platform for researchers around the world to communicate and share their technical works.

In addition to a normal special issue, the IET Cyber-systems & Robotics will support organizers to build an online workshop dedicated to the special issue, which will provide an opportunity for readers to interact with the authors of each paper included in the coming special issue. After the workshop, video links of each presentation will be added to the papers online with the permission of authors.

Topics of interest include, but are not limited to:

- Multi-sensor information fusion technology
- Autonomous positioning and mapping technology
- Autonomous navigation and planning technology
- Learning-based robotic perception and planning
- Bionic perception technology
- Scene understanding technology based on reinforcement learning
- Intelligent control technology for unmanned air vehicles, unmanned ships, unmanned submersible, and unmanned vehicles
- Visual servo control
- Teleoperation technology for unmanned system
- Disturbance rejection control of unmanned systems in complex environments

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