Special Issue

Motion Trajectory Prediction for Mobile Robots

Message from the Guest Editors

Autonomous robot systems will profoundly impact on our society as transportation and delivery service providers and assistants in our households and hospitals. For the first time, robot taxi companies have begun commercial operations without safety drivers. They have started to test their autonomous last mile delivery systems on the streets. Human environments are intrinsically dynamic, and the robots must be able to navigate them to avoid collisions. Therefore, trajectory prediction models are essential to enable safe and efficient autonomous transportation. This Special Issue invites all research articles on trajectory prediction and interaction modeling applied to autonomous robots. Topics of interest include (but are not limited to):

- Trajectory prediction;
- Grid prediction;
- Interaction modeling;
- Real-time trajectory prediction models;
- Robotic systems employing trajectory prediction models;
- Motion planning;
- Path planning and obstacle avoidance;
- Trajectory prediction for multi-robot systems.

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Deadline for manuscript submissions

closed (31 May 2024)



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About the Journal

Message from the Editor-in-Chief

It is my great pleasure to welcome you to our open access journal, *Robotics*, which is dedicated to both the foundations of artificial intelligence, bio-mechanics and mechatronics, and the real-world applications of robotic perception, cognition and actions. The 21st century is the robotics century and intelligent robots will change our lifestyle forever. Let us work together toward the realization of intelligent robots step by step. It is great fun to create intelligent robots and imagine their practical applications. *Robotics* is now ready to serve you in the long journey towards such a goal.

Editor-in-Chief

Prof. Dr. Marco Ceccarelli

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