

Special Issue

Autonomous Driving: Advancements in Cognitive Perception Systems for Increased Level Autonomy

Message from the Guest Editors

This Special Issue focuses on the recent advances in perception and cognition technologies of autonomous vehicles. Scientists are encouraged to submit their outstanding work towards addressing this issue, focusing on (but not limited to) the topics listed below:

- Semantic segmentation of urban and/or rural environments.
- Efficient navigation in urban environments.
- Navigation in semi-structured and GPS-denied areas.
- Trajectory planning and following for narrow areas.
- Vehicle cognitive reaction methods.
- Pedestrian detection.
- Localization and navigation in parking areas.
- Hybrid SLAM applications.
- Collision avoidance and safe vehicles reactions.
- Adaptive decision making and dependable behavior.
- Light deep learning for autonomous driving.
- Decentralised control schemes for driverless vehicles.
- Fleet management systems for self-driving vehicles.
- Driverless vehicles in supply chain and logistics.

Research, position and survey papers are welcome, in addition to papers proposing new datasets and novel evaluation methods.

Guest Editors

Prof. Dr. Antonios Gasteratos

Department of Production and Management Engineering, Democritus University of Thrace, Vas. Sofias 12, GR-67100 Xanthi, Greece

Dr. Ioannis Kostavelis

Centre for Research and Technology Hellas, Information Technologies Institute, 57001 Thessaloniki, Greece

Deadline for manuscript submissions

closed (31 December 2022)



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Machines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
machines@mdpi.com

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About the Journal

Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided. There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

Editor-in-Chief

Prof. Dr. Antonio J. Marques Cardoso
CISE - Electromechatronic Systems Research Centre, University of
Beira Interior, Calçada Fonte do Lameiro, P-6201-001 Covilhã, Portugal

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