Special Issue

Advances in Robotic Manipulation through Artificial Intelligence and Innovative Gripping Concepts

Message from the Guest Editors

Manipulation is a key ability for both industrial and service robots. Traditionally, handling tasks have been defined by robot operators who use their own criteria and knowledge to define the best way to pick up a product, taking into account the characteristics of the part, the environment, the available tool and the subsequent operations to be performed with the part. This Special Issue aims to collaborate with researchers to present recent advances and technologies in the field of robotic manipulation. The topics of interest include, but are not limited to:

- AI technologies and applications for perception, manipulation and assembly;
- Innovative grasping concepts, including soft grippers;
- Learning from demonstrations;
- Control architectures;
- Flexible task planning and control;
- Human factors in manipulation applications.

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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.

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