

Paper Submission

Authors are encouraged to submit high-quality, original work that has neither appeared in, nor is under consideration by, other journals.

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Important Dates

- Paper submission deadline:
January 15th, 2013
- First reviews completed:
April 1st, 2013
- Revised papers due:
April 30th, 2013
- Final decision:
June 1st, 2013

Special Issue Call for Papers

Beyond Grasping: Modern Approaches for Dextrous Manipulation

Heni Ben Amor
TU Darmstadt

Nicolas Hudson
Jet Propulsion Laboratory

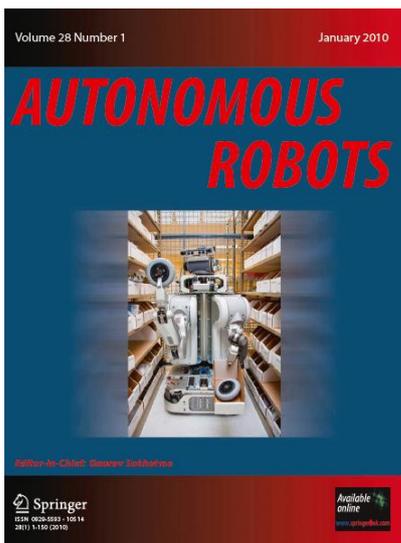
Ashutosh Saxena
Cornell University

Jan Peters
TU Darmstadt

In recent years, grasping has matured to the point where various robots can reliably perform basic grasps on unknown objects in unstructured environments. While this achievement is a major milestone for robotics, it has not yet translated into major advances in manipulation. Instead, these robots are still far from human-level manipulation. They still lack many manipulation skills, ranging from sequenced multi-object tasks (such as stacking and tool usage) to bimanual or in-hand manipulations of objects and interactions with non-rigid objects. As these manipulations involve interacting with uncertain real-world environments, they pose major problems for many current approaches and traditional methods that depend on accurate models of the robot and its surrounding. Hence, there is strong need for more advanced methods that can manipulate objects in the face of uncertainty.

Autonomous Robots seeks submissions Special Issue on “*Beyond Grasping – Modern Approaches for Dextrous Manipulation*”. This special issue focuses on how modern sensors data processing algorithms, movement generation approaches or learning methods can help robots go beyond basic grasping abilities towards more advanced dextrous manipulation skills. We invite submissions of high-quality research papers that address important challenges in robot manipulation. We also solicit submissions that rigorously discuss and compare current state of the art techniques, as well as recent advances in the field, or open challenges.

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