

A Sensitive Approach to Grasping

Controlling the interaction between the robot and the environment is of fundamental importance, not only to solve manipulation tasks but also to allow robots to autonomously explore the environment and learn from it. Unfortunately, these tasks turn out to be quite challenging, especially in unstructured environments. In this talk I'll show the importance of tactile and force feedback in this context. I'll describe the implementation of a grasping behavior mainly driven by tactile feedback that allows a robot to grasp objects placed on a table. Finally, I'll demonstrate that the haptic feedback originating from the interaction between the robot and the objects carries information about their shape that can be useful for learning.