

Working Student: Tactile Perception for Robotic Manipulators

Job Description

We are seeking a master's student to help us develop approaches to expand the tactile perception for robotic manipulators. Our robots are equipped with different sensors to be used for that task, e.g. the robots own joint torque sensors, 6 DOF force/torque sensors in the robots fingertips, tactile arrays. Our aim is to give robots a sense of touch.

Together with our partners NEURA Robotics and Wittenstein we will also work on evaluating a digital twin of an actuator for the purpose of joint torque measurements without having a joint torque sensor.

Task Description

- Getting familiar with the setup
 - Joint Torque Measurements
 - Force/Torque Measurements
 - Tactile Array Measurements
- Implementation of state-of-the-art algorithms for tactile perception under supervision.
- Evaluation of the actuator digital twin

Prerequisites

- Intermediate or advanced programming experience in C++
- Intermediate or advanced knowledge in Robotics
- Hardware-savvy

Application

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