



Faculty of Mechanical Science and Engineering Institute of Solid Mechanics

10.09.2021

Chair of Dynamics and Mechanism Design

Research Project/Master's Thesis

Force control for fully actuated multicopters

Background

At the Chair of Dynamics and Mechanism Design, fully actuated multicopters for tactile interaction tasks are developed.

One focus is on the development and commissioning of controllers and control concepts for force control. Depending on the project status, there are various possible topics for student research projects or diploma theses.



Topic Areas

- (Further) development of models and observers for the determination of interaction forces and torques
- (Further) development of controllers for position and force control
- Commissioning and testing on the current prototype

Contact:

Dipl.-Ing. Micha Schuster

E-Mail: micha.schuster@tu-dresden.de

Required Prior Knowledge

- Basics in (mobile) robotics& control engineering
- Matlab/Simulink