

Faculty of Mechanical Science and Engineering Institute of Solid Mechanics

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Chair of Dynamics and Mechanism Design

Diplomarbeit / Studienarbeit

Real-time capable implementation of a control system in ROS2



Small and inexpensive single-board computers (e.g. Raspberry Pi) now have high computing power. They are therefore to be used in the RopeBot project for complex calculations in the control system.

The goal of the work is to implement the existing control in ROS2 on a single-board computer. The computations are to be optimized in terms of computation time and real time.

Possible tasks are:

- Installation and configuration of a suitable real-time operating system
- Checking the existing control code for real-time capability and, if necessary, adapting the software
- Computation time optimization

Contact

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