

# Multi-robot Collaboration in DLO-Handling

## Problem Statement

The inherent complexity of deformation is a problem in robotic handling of deformable linear objects (DLOs) such as cables. Manipulation of DLOs often requires the collaboration of multiple robotic manipulators. The integration of sensory data from multiple sources is crucial to enable efficient bin picking and subsequent manipulation of these objects.

## Objective

The aim of this thesis is to enhance the collaborative efforts between robotic systems for the supply and handling of DLOs during the assembly process. Therefore, a concept for the handover of a DLO from one robot to another is supposed to be developed. This will involve a comprehensive literature review to identify a suitable approach, which will then be implemented on an actual robotic system.

## Requirements

- Structured way of working;
- Independent problem solving ability;
- Basic knowledge of robotics and robot motion planning;
- Python programming experiences;
- Working experience with Robot Operating Systems (ROS) will be a plus.

## Contact Information

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