EBERHARD KARLS
UNIVERSITÄT
TÜBINGEN

Mathematisch-Naturwissenschaftliche Fakultät
Fachbereich Informatik
Kognitive Systeme (Prof. A. Zell)

Bachelorarbeit

A Person following module for a smart E-Rollator

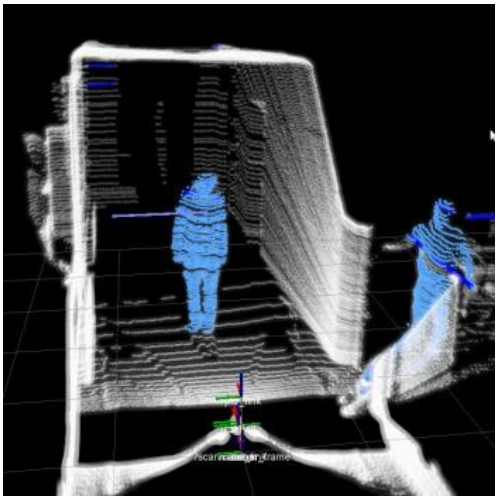
The beActive+e is an E-rollator, which in the scope of the BMBF project MobilAssist should be enhanced to a personal mobility assistant. The rollator is equipped with a stereo camera and a lidar to perceive its environment. Using these sensors we want to add the capability to autonomously follow a person. This allows many interesting applications.

A pipeline for person following with a skid steered robot (Summit XL) was already developed at our department, containing person detection, path planning and motor control. These existing ROS modules should be reused and adapted, if possible.

The goal of this thesis is to adapt these modules to the rollator's sensor and hardware setup, collect a set of test data and perform an evaluation of the implementation.

Requirements:

- Good programming skills (C++)
- Knowledge of *ROS (Robot Operating System)* is beneficial



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