Master's Thesis

Depth data analysis for investigating robotic grasp estimates

Many robotic applications are based on computer vision, which relies on the sensor output. A typical example is semantic scene analysis, with which the robot plans its motions. Many computer vision algorithms are trained in simulation which may or may not represent the actual sensor data realistically. Physical sensors are imperfect and the output erroneous data may deteriorate the performance of the required tasks. In this thesis, we will analyze the sensor data and estimate its effects on the final robotic task.

Prerequisites

Required background:

- Digital signal processing

- Image analysis / Computer vision

- Neural networks and other ML algorithms

Required abilities:

- Experience with Python or C++

- Experience with Tensorflow or PyTorch

- Motivation to yield a good thesis

Contact

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(Please provide your CV and transcript in your application)

Advisors

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