



Object Detection and Following for Quadcopters

Nowadays flying robots are widely applied and quite popular in many fields of research. Quadcopters are a kind of classic flying robots. They are cheap, light, and may be programmed for many tasks.

The task of this bachelor thesis is to detect a moving object (a person or wheeled robot) and follow it at the given height outdoor. The robot should detect obstacles like trees or walls and avoid them. A new and fast algorithm is expected, while using an existing algorithm to implement it well is also acceptable.

The quadcopter to be used has one downward-looking color camera, and one forward-looking RGBD camera. The experiments may be started in flying robot lab, but should be continued outside.

Requirements:

- Interest in Quadcopters, preferably practical of flying robots course
- C++ programming and Python
- Be familiar with ROS
- Communicate with the tutor in English



Kontakt

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