



# Master Thesis or Internship

## 3D Visual Localization

### **Description**

3D Visual Localization uses successive images from a camera to detect motion and 3D information, that with the help of a SLAM Algorithm and a previously built 3D map of the environment, will be able to compute the pose of the camera in 3D space in real time, allowing this to be used as a localization technique for mobile robots or drones. Current effective localization techniques are constrained to 2D space, therefore limiting their use on suitable environments, like flat-floor indoors.

### **Previous Knowledge Required**

C++, OpenCV, ROS  
Basics of 3D Point Cloud Processing

### **Contact**

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