Backprojection on SPOT, Part 1

In this project you will be working on our new robot SPOT. The goal is to provide the robot with a *Backprojection* capability: Imagine, the robot is equipped with a video projector: How can the robot use this video projector for augmented reality? For example the robot can identify missing installations on a construction site and generate a projection to visualise this (see Fig. below).

Your task in this project will start out in the lab: You will use an RGBD camera to identify a wall / flat surface. Then, you will use an LED-based Video Projector to project an imager onto that surface. Finally, you will install this on the SPOT robot

To do this work, you should ideally have good python skills. You should know linux, ideally you have completed the applied machine learning and a course in Computer Vision or Image processing with a good grade. Ideally, you have also a good software engineering background.

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