

Make SPOT bring you a cafe!

In this project you will be working on our new robot SPOT. YES, you get to play with the real thing!!!

The robot is provided with navigation capabilities, i.e., it find its way to provided waypoints. It has cameras with which it can see and an arm and gripper to grasp things. Furthermore, SPOT comes with a large SDK that readily provides high-level functions.

Your task is to implement a cool *Get me a cup of cafe* demo on the SPOT robot. You will not need to start from scratch but you will be able to rely on a huge amount of existing software:



- a similar demo exists for our other mobile robot platform HERON,
- you will be able to rely on SPOT's SDK for most low-level functions, incl. navigation, arm control, object detection, etc.
- CI/CD pipelines for Gitlab and good docs make implementations fast and smooth.
- You will be able to use SKIROS for easier robot skill modelling and high-level robot skill control.

To do this work, you should have

- **very good python skills.**
- **Good knowledge of linux**
- **done a course in Robotics.**
- **Good knowledge of ROS, the Robotics Operating System. If you really want to do this project and you do not know ROS, then we can provide you with some very good on-line courses. However, you would have to do these ROS courses before(!) you start the project.**
- **Ideally, you have also a good software engineering background.**

Contact:

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