

## Practical Nr. 1

### Preparation:

Install the necessary packages:

```
sudo apt install ros-kinetic-hector-sensors-description  
sudo apt install ros-kinetic-hector-gazebo-plugins
```

Get the latest simplebot code from github:

```
https://github.com/JuliusGel/RVSP
```

### Running the code:

The code for wall following is located in follow\_wall package. All necessary nodes can be started using this launch command:

```
roslaunch follow_wall follow_wall.launch
```

### Task:

You have to change the code in follow\_wall package in particular adjustments should be made to:

```
src/follow_node.cpp
```

At the moment this node contains code to receive sensor data and to send sensor commands. However, the received sensor data is not used to calculate the issued velocity commands. Your task is to use sensor data and issue velocity commands that would make sure that your robot follows a wall without hitting it. Good luck!

Note: After you make changes to code don't forget to recompile the code! This can be done by calling the following command in your workspace:

```
catkin_make
```