

# 1. Assignment, Introduction to Robotics WS19/20 - Ver. 1.01

Prof. Daniel Göhring

Institut für Informatik, Freie Universität Berlin

Submission: online until Tuesday, 22 Oct 2019, 11:55 a.m.

**Please summarize your results (images and descriptions) in a pdf-document and name it, e.g., “RO-01-<surnames of the students - group name>.pdf”.**

**Only one member of the group must submit the necessary files.**

**Do not copy solutions to or from other groups. Do not copy solutions from the web.**

**Every group must contain two people.**

**Only submissions via KVV will be accepted.**

## 1. Connect to the model car via SSH (4 Points)

Connect an ethernet cable between your computer and the model car. Read the relevant Wiki pages for connecting to the Odroid and Network configurations:

<https://autominy.github.io/AutoMiny/>

Then create an SSH connection to the model car 1. via ethernet as well as 2. via WLAN. If you don't have an SSH client application installed on your machine, now is a good time to install it.

Create a text file “hello\_car\_XY.txt” in the model car's **home** folder, where XY is the name of your group. Open the file with a terminal text editor like **nano** or **vim**, write the current date and time into the file and save the file. After that, from a new **local** terminal view (not from an ssh-terminal on the car), copy the file to your machine using the **scp** command.

Create some screenshots showing that you performed these steps.

## 2. Create a repository (2 Point)

Fork the repository [https://github.com/AutoModelCar/catkin\\_ws\\_user](https://github.com/AutoModelCar/catkin_ws_user).

It would be nice, if some of your results may be merged into the AutoModelCar repository at the end of the course.

Write the url of your repository as a solution of this task.

## 3. ROS Installation (4 Points)

Install the **ROS-Melodic** package (**recommended: together with Ubuntu 18.04 LTS**).

Therefore, the tutorial can be found under: <http://wiki.ros.org/melodic>

To get a basic understanding of the basic concepts in ROS, read the subsection 1-5 of the tutorial: <http://wiki.ros.org/ROS/Tutorials>

Setup your environment variables. Read the section 2 of the tutorial:  
<http://wiki.ros.org/ROS/Tutorials/InstallingandConfiguringROSEnvironment>

Open a terminal window and run the command: **roscore**  
Create some screenshots showing that you performed these steps.