thws Technische Hochschule Würzburg-Schweinfurt

Faculty of Computer Science and Business Information Systems
5172080: Fundamentals of Mobile Robotics

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Computer Practical Instructions

Monday 12:10-13:10, Weeks 43, 45, 47 - 48, 2, and 4 of the calendar year.

Attendance

Lab sheets for all six labs will be available on E-Learning. Although it is possible to complete the lab anytime after the sheet has been released, students are highly encouraged to solve the tasks before or during the scheduled lab session. This provides the best learning experience and is the best way to prepare for the exam.

Python

- Students need to familiarise themselves with Python 3 coding, e.g. by working through the tutorial video at `https://youtu.be/rfscVS0vtbw`. Additionally, quick guide on Python is given in the Python cheat sheet, which is on E-Learning. I will be available to answer any Python-related queries during the lab hours.
- Python can be used both interactively in command line or by executing scripts, e.g. from within an IDE, for solving numerical computations.
- Python is freely available for Linux, Mac OS, and Windows at `https://www.python.org/downloads/`. I do recommend for

  Windows Students can find the Python modules and editors integrated in one installer at `https://winpython.github.io`. It includes all the important Python modules and IDEs for interactive debugging. Once installed, you can open the interactive debugger 'Spyder' and start writing your code. Students should ensure that they configure Spyder appropriately by selecting the "Run in an external system terminal" option in the "Run configuration by file" window before executing their Python scripts.

  Linux Students can use the `python` package that is most probably included in your distribution. In addition, you might need to install the `python-scipy` package or alike.