Robot Learning
Assignment Instructions

UNIVERSITÄT BONN   AIS

Rheinische   Institute for Computer Science
Friedrich-Wilhelms- Department VI
Universität Bonn   Autonomous Intelligent Systems
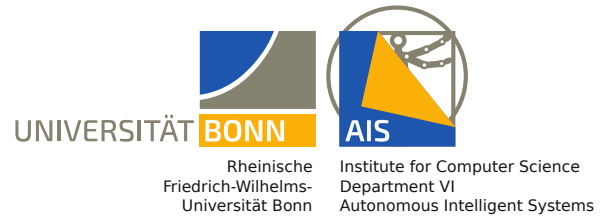
Setup

The assignments will contain exercises with written as well as practical code solutions. Therefore, we will use Jupyter Notebooks to provide supporting code fragments from our side together with a structured input for text and script solutions for your usage in a unified framework.

For this purpose, please install Anaconda for your platform. Next, open a terminal (special case Windows: Anaconda Prompt) and create an encapsulated Python environment for the exercises. When copying the following commands, make sure that your clipboard is not switching dashes and hyphens:

```
conda create -n rl_env python=3.9 matplotlib=3.5 anaconda
```

Activate it by typing:

```
conda activate rl_env
```

Optionally, when using Jupyter Notebooks, it is often useful to have the ability to select the kernel of a specific python environment directly within the notebook. To enable this, type:

```
ipython kernel install --name "rl_kernel" --user
```

As a final sanity check, execute

```
jupyter notebook
```

and navigate to `http://localhost:8888/tree` in your webbrowser. On the right, there should be a dropdown menu labeled *create* that allows starting new Jupyter Notebooks using the *rl_kernel*. You are now all set to go!

In a suitable terminal, navigate to a **copy** of the directory **RL_Assignment_01** from the RL_SS24 repository. Start a notebook server as described above and open the Jupyter Notebook *RL_Assignment_01.ipynb*, switching to the *rl_kernel* if necessary. There, complete the theoretical and practical tasks! Your answers should be given directly within this Jupyter Notebook.

Submitting your solutions

First, register on sciebo to activate your Sciebo-ID (usually the same as your Uni-ID). Concurrently, given your participation in this process, TVS has assigned you to an exercise group. At this point, together with information from the lecture, you will know your tutor's name.

Correspondingly, please write **one** email until 19.04.2024 to s6vitute@uni-bonn.de,

s6vtscho@uni-bonn.de or s6mozapp@uni-bonn.de **per assignment group of 2-3 students** with the following contents:

Per group member:

- Name

- Sciebo-ID

- email address

In turn, your tutor will share a sciebo directory with you and your group where you can upload your solutions. This should be in the form of the Jupyter Notebook provided in the lecture repository and completed by you. Please include the whole file structure necessary for executing the notebook. Zipped archives are fine, too. Once your solutions are graded, your tutor's comments will appear in your sciebo directory.

If you have any questions or encounter any problems, do not hesitate to contact

nogga@ais.uni-bonn.de!