

Setting up your NNIA python environment

1. Installing conda

In order to provide you with a clean python environment we make use of conda. Conda is a package, dependency and environment manager which makes it very easy to find, install and maintain python packages. To install conda on your system download the **Python 3.6** installer [here](#). Next, follow the instructions given here: [Linux](#), [Windows](#), [macOS](#).

2. Check your installation

Run the following comand to obtain a list of your conda environments:

```
conda env list
```

The output should look similar to this

```
# conda environments:
#
root                * /home/marius/miniconda3
```

3. Setting up your NNIA environment

In order to set up a new environment for your exercises run the following command:

```
conda env create -f nnia-env.yml
```

You find the nnia-env.yml file attached. It contains a list of dependencies, such as *numpy*, *scikit-learn*, *matplotlib* and *tensorflow*, which are needed to run the exercises.

In case you are not able to run the conda command from your command line or terminal make sure your PATH variable is set up appropriately.

4. Activate your environment

To activate your environment run the following command:

- Windows:

```
activate nnia
```

- macOS and Linux:

```
source activate nnia
```

5. Check your packages

After the activation of your environment run the following command to see a list of packages that are contained in the environment:

```
conda list
```

6. Start coding

In order to start with the exercise you need to launch the *jupyter notebook* server. To do so follow this steps:

1. Make sure your **nnia environment** is activated. The currently active environment is shown in (parentheses) or [brackets] in front of your prompt.
2. Navigate to the folder containing the exercise sheet

```
cd /path/to/nnia-sheet-0
```

3. Launch the notebook server by running

```
jupyter notebook
```

4. Open the nnia-sheet-0.iypnb file and follow the instructions given there.

7. Deactivate your environment

To deactivate your environment just run the following command:

- Windows:

```
deactivate
```

- macOS and Linux:

```
source deactivate
```

8. Further references & help

To make yourself familiar with conda and the jupyter notebook we recommend the following sources:

- [Conda user manual](#)
- [Jupyter documentation](#)
- [Jupyter tips, tricks, and shortcuts](#)

In case you have any troubles during the setup feel free to send an email at mosbach.marius@gmail.com.