

Deep Learning for Nonlinear System Identification

Instructions to setup Python environment

To solve the exercises provided in the course, you should work in Python by completing some Jupyter notebooks provided by the lecturers. Thus, you need a recent version of Python with several packages.

We suggest creating a Python environment with the requirements specified in the **requirements.txt** file, available on the GitHub repository of the course. You can do this automatically by running the following command lines through the Anaconda Python distribution, which provides the **conda** package manager. Visit <https://www.anaconda.com/download/> to download Anaconda.

Requirements

Open the Anaconda terminal and run the following commands in the repository folder (where `requirements.txt` is located) to create a separate environment and install all required dependencies in it:

```
conda create --name <env_name> python=3.11
```

```
conda activate <env_name>
```

```
pip install -r requirements.txt
```

where `<env_name>` is the name you want to assign to your environment (for example, *SYSIDLugano24*)

Running the notebooks

Before running any code you must activate the conda environment through the command:

```
conda activate <env_name>
```

This will enable the environment for your current terminal session. Any subsequent commands will use software that is installed in the environment.

To run the notebooks with the exercise, open jupyter lab or jupyter notebook running one of the following commands

```
jupyter lab
```

```
jupyter notebook
```

This will start the server and open your default web browser to the Jupyter interface. In the page, go into the notebooks folder and select the notebook that you wish to view/run.