

School of Electronic Engineering and Computer Science

ECS708 Machine Learning

Lab 0: Python Tutorial

Aim

The aim of this lab is to become familiar with Python and the Numpy/Matplotlib libraries.

1. Basic introduction to Python

For a general introduction to the Python language, please follow the tutorial at:

- https://www.learnpython.org/
- https://www.programiz.com/python-programming/tutorial

In both sites, you can run python commands interactively.

For those who already know a bit about python, you can selectively read and try official tutorials. https://docs.python.org/3/tutorial/

2. Introduction to Numpy and Matplotlib

For a brief introduction to numpy and matplotlib, please install the Jupyter environment.

https://jupyter.org/install.html

Find *LabO Numpy and Matplotlib.ipynb* and run.

https://jupyter.readthedocs.io/en/latest/running.html#running

There are several other online tutorials, some more comprehensive than others. A good list can be found at:

- http://cs231n.github.io/python-numpy-tutorial/
- https://www.machinelearningplus.com/plots/matplotlib-tutorial-complete-guide-python-plot-examples/

3. ECS708 environment installations

Please refer to Python_Installation_Tutorial.pdf for more information on how to install the environment needed for the Assignments for the module.

4. Submission

No submission is needed