NLP Lab: Installing Jupyter Notebook

Accessing Lab Machines

For accessing the lab machines from home, you can use the **remotelabs** from your web browser. Firstly, you need to connect via VPN, i.e. you need to have **GlobalProtect** installed and running. Please visit https://it.surrey.ac.uk/off-campus-access for setting up GlobalProtect. After setting up the VPN, simply use the browser to go to https://remotelabs.eps.surrey.ac.uk/. Then select **Linux LAB Heron**

Accessing Jupyter Notebook

For most lab sessions, we will be using python Jupyter Notebooks. You can install and run the Jupyter Notebook server on the lab machines or your computer. Below are some simple steps to install and get started with Jupyter Notebook.

You can also install and use Jupyter Notebooks on your own computer, e.g. using Anaconda. Please visit the following link for installation details : https://www.anaconda.com/products/individual

Another option is to use Google Colab (make sure you are logged in Google):

1. First download the .ipynb file to your local Downloads folder
2. Go to https://colab.research.google.com/
3. Go to File > Upload notebook, select the .ipynb file you just downloaded

Install Jupyter Notebook in Lab Machines

From the Linux machines in the lab, open a terminal (press *Ctrl + Alt + T*)
From the terminal try the following command to see if Jupyter Notebook is already installed:

$ jupyter notebook &

or try

$ ~/.local/bin/jupyter notebook &

(if Jupyter is installed on your local user directory).

or try

$ source /etc/profile.d/zz_00-lmod.sh
$ ml Anaconda3/2020.07
$ jupyter notebook

If Jupyter is not installed then you should be able to install it using one of the following commands:

$ pip install notebook

or

$ pip install --user notebook

(if you want to install it on your local user directory).

Try again to run jupyter using one of the following commands:

$ jupyter notebook &

or

$ ~/.local/bin/jupyter notebook &

or

$ source /etc/profile.d/zz_00-lmod.sh
$ ml Anaconda3/2020.07
$ jupyter notebook

or open the following address in your browser (e.g. Firefox): *http://localhost:8888/*

Getting Started With Jupyter Notebooks

The "Files" tab is where all your files are displayed, the "Running" tab keeps track of all your processes and the "Clusters" tab is provided by IPython parallel, IPython's parallel computing framework.

You probably want to start by creating a new notebook. You can easily do this by clicking on the "New button" (*Located in the right side of your home screen*). You see that you have the option to create a regular text file, a folder, and a terminal. Lastly, you will also see the option to make a Python 2 notebook. After creating a notebook your "Editor" screen will be displayed.

Each row in the editor is known as a "Cell". You can add cells by clicking the "+" symbol in the left side of your menu bar. You can run each cell either by clicking the "run" button in the menu bar or the shortcut "Shift+Enter".

You can save notebook files in different format including PDF, HTML and Py, which can be done by "File" menu > "Download as" > "PDF/HTML/Py/..".

More information on how to use Jupyter Notebook (e.g. how to create and edit "Markdown Cells" etc) can be found from the following page:

https://jupyter-notebook.readthedocs.io/en/stable/examples/Notebook/examples_index.html

If you are still learning Python programming, then you may find the following short tutorial useful:

https://developers.google.com/edu/python