

Running Notebooks

Running Jupyter Notebooks is an easy way to learn/practice functional python and machine learning. There are some disadvantages in the applications that require fast runtime

or when running analyzing very large data sets where working with executables directly on a farm are generally more time efficient. Here we provide some basic steps to get going.

For a full introduction see for example: [Jupyter notebook introduction](#)

There are three basic ways we suggest to get up and running pretty quickly, Colabratory, Rivanna, and installing locally.

Example

Working with Google Colabratory:

- 1.) Go to [google colab](#)
- 2.) Download from the Example test.ipynb above
- 3.) In the file tab of the colab interface, select Upload Notebook
- 4.) The notebook should load and you can start running it by clicking on it at the beginning and then hitting shift return. Each set of commands are indexed by [1] and then the comments in the notebook show up as just regular text.
- 5.) Run over all commands and checkout the final results

Working with Rivanna:

- 1.) Go to [Rivanna Dashboard](#)
- 2.) Click on Interactive Apps
- 3.) Select JupiterLab
- 4.) Select your requirements: partition, number of hours, number of cores,...
- 5.) Click Launch and wait for availability
- 6.) When ready click on Connect to JupiterLab
- 7.) In the launcher select TensorFlow 2.1/Keras Py3.7 (this can also be selected later by selecting Kernel in the upper right corner of the browser app)
- 8.) Upload file by clicking the up-arrow in the upper left corner of the browser app
- 9.) Then the same rules apply as for the above description

Install Locally:

Install Jupyter (<https://jupyter.org/install>)

Install TensorFlow (<https://www.tensorflow.org/install>)