Data Science Environment Setup Workshop

Installing Anaconda

- https://www.anaconda.com/distribution/#download-section
- (Download Python 3.7 version)
- If you have Linux, once you download the .sh file, locate it in your directory and run the command *chmod u+x* to make the file executable. Then, execute it with: *./filename*

Creating Virtual Environment

- conda create -n dsenv python=3.7 anaconda
- conda activate dsenv (*example output: (dsenv) adi@vellal-MACH-WX9:~$*)

TensorFlow, Keras, Tqdm

- **TensorFlow:**
  - conda install -c conda-forge tensorflow
- **Keras:**
  - conda install -c anaconda keras
- **Tqdm:**
  - conda install -c conda-forge tqdm
- **Matplotlib**
  - conda install -c conda-forge matplotlib

Test Python Install

```
$ python
>>> import tensorflow as tf
>>> import keras
>>> import numpy as np
>>> import matplotlib
>>> import tqdm
>>> exit()
```

Jupyter Test and Deactivate Environment

- jupyter notebook (type this in terminal with environment activated)
- ctrl + c (press these two keys to get terminal prompt back)
- conda deactivate dsenv (use this to deactivate environment, and then you are free to close your terminal)

R, RStudio Install and Test

- Download and Install R: http://archive.linux.duke.edu/cran/
- Download and Install RStudio: https://www.rstudio.com/products/rstudio/download/#download

Further References

- https://towardsdatascience.com/installing-keras-tensorflow-using-anaconda-for-machine-learning-44ab28ff39cb