## Setup\_NYU

January 26, 2021

## 1 Your Machine Learning Environment

Machine Learning (ML) and Data Science is an *experimental* science - You will not be a passive participant - Your real learning will come from *actively* experimenting with data and programs - This course will provide you with a lot of working code - Play with it! Modify and break it! Learn! - You will write lots of code of your own - Assignments and course project - Your own experiments and self-directed projects

You will need a minimal collection of software to facilitate this.

It is what we call your Machine Learning Environment.

Moreover: - All material in this course is provided in machine readable format - The lectures/slides are provided in a container called a *Jupyter Notebook* - We will learn more about Jupyter shortly

In order for you to view a Jupyter notebook (and hence, follow along with the lecture) - You will need access to a Jupyter notebook server - With additional Machine Learning software installed

So before we begin: let's make sure you have access to a properly configured Jupyter server.

The recommended way to access a Jupyter server with the additional Machine Learning software installed - Install the software on your local machine - Download the course material to your local machine

This is required before you can start to learn.

We provide detailed instructions on how to create a Machine Learning environment on your local machine.

The *real advantage* of having the environment on your local machine - You will be able to continue to experiment and learn once the course is over

## 2 Navigating the course

When you start your properly configured Jupyter notebook server, you should see something like this - Listing of files in the top-level of the course directory - Find the file Index.ipynb and click on it

Index.ipynb is the "start page" for our lectures - One section per week - Containing our plan - And links to the notebooks to start our lectures - These notebooks may have links to other notebooks that we will use

So, each week, begin your learning by visiting **Index.ipynb**.

By clicking the links, you will see the material that is presented as "slides" on the video. You will also be able to access working code from which to learn.