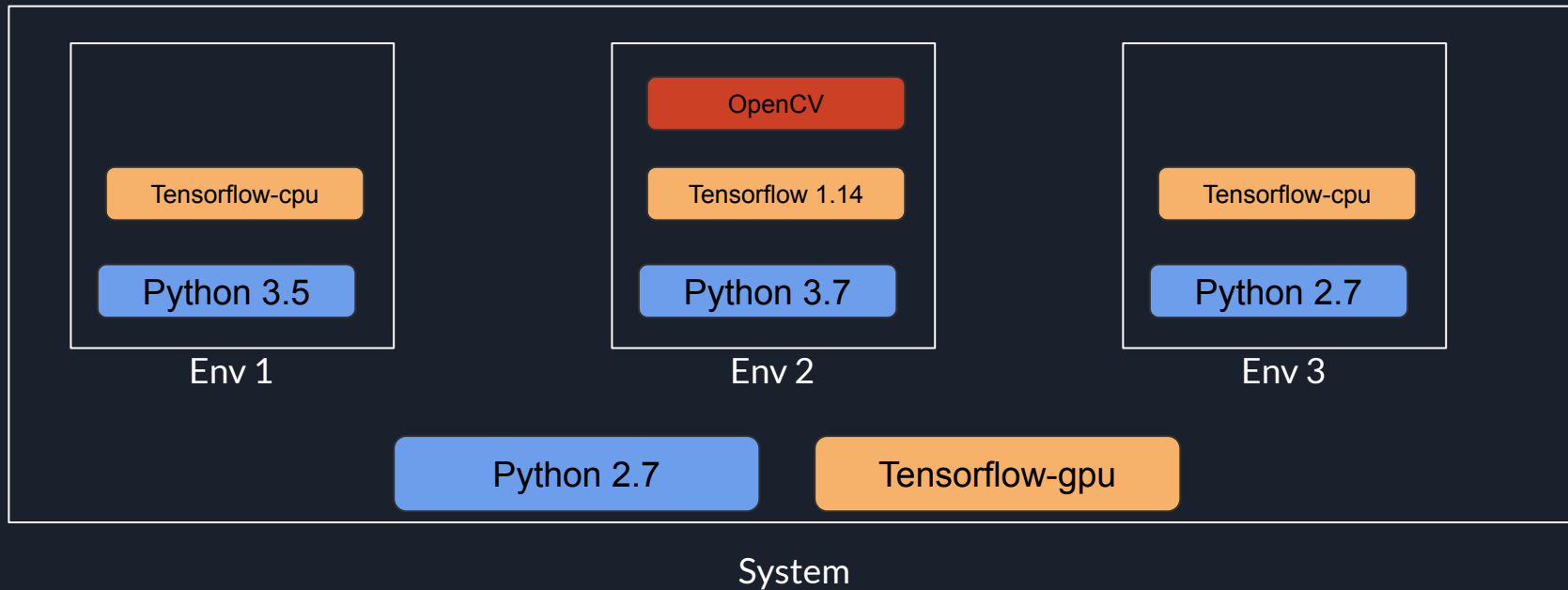


# Introduction to Machine Learning and Tensorflow Part 2

Manu Mathew Thomas  
Creative Coding Lab

# Setting up Anaconda

Anaconda is a python distribution with a virtual environment manager





# Setting up Anaconda



Download and install Anaconda:

<https://www.anaconda.com/download/>

On Windows, open anaconda prompt

On Mac/Linux, open terminal

Type *conda* and press enter to verify



# Setting up the environment

To create a new environment

Type `conda create -n "name of the environment" python="version"`

For eg: `conda create -n project1 python=3.5`

`conda create -n project2 python=2.7`

To delete an environment

Type `conda env remove -n "name of the environment"`



# Setting up the environment

To activate an environment

Type *conda activate "name of the environment"*

For eg: *conda activate project1*

To deactivate

Type *conda deactivate*



# Install Tensorflow using pip

pip - Package manager for python packages

Current release for CPU-only

```
pip install tensorflow
```

GPU package for CUDA-enabled GPU cards

```
pip install tensorflow-gpu
```

\* There is *no* GPU support for macOS.



# Verify Tensorflow

Open python console

Type *python*

```
>>>
```

Import tensorflow

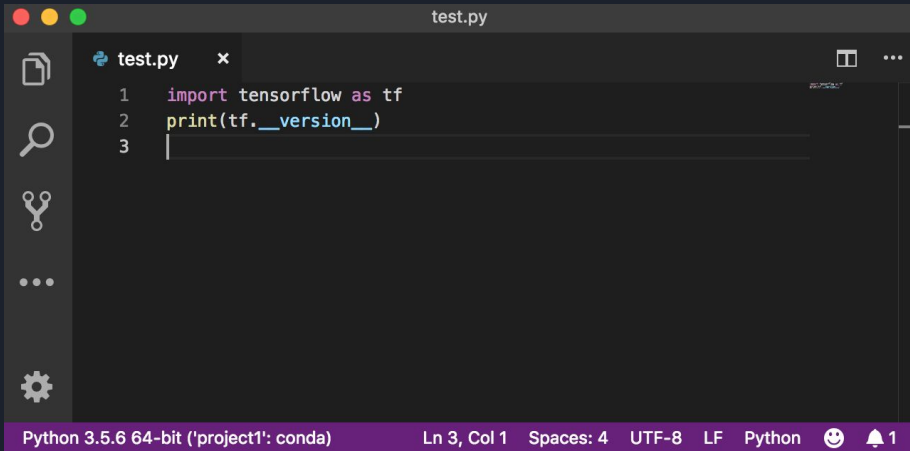
```
>>> import tensorflow as tf
```

Verify tensorflow version

```
>>> print(tf.__version__)
```

```
2.1.0
```

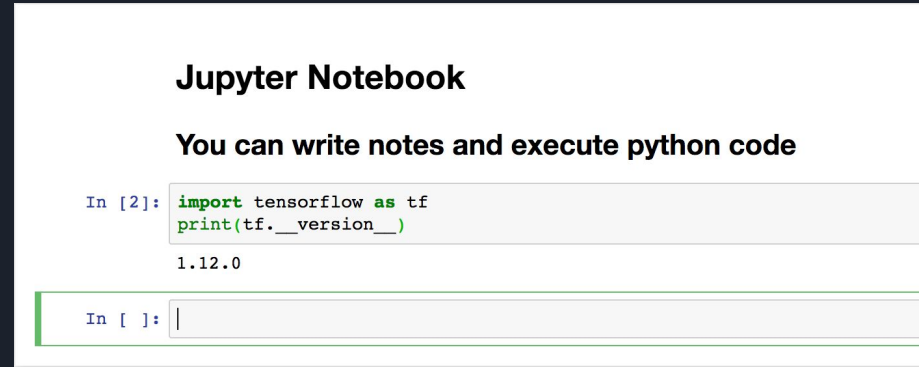
# Running python code



```
test.py
1 import tensorflow as tf
2 print(tf.__version__)
3
```

Python 3.5.6 64-bit ('project1': conda) Ln 3, Col 1 Spaces: 4 UTF-8 LF Python

Code Editor



## Jupyter Notebook

You can write notes and execute python code

```
In [2]: import tensorflow as tf
print(tf.__version__)
1.12.0
```

```
In [ ]: |
```

Jupyter Notebook





# Setting up Jupyter

Install ipython and jupyter in our environment

```
conda install -n project1 ipython jupyter
```

Run jupyter notebook

```
jupyter notebook
```