1. If you need to remove old versions of Python

sudo rm -rf /Library/Frameworks/Python.framework

cd /usr/local/bin

ls -l . | grep '../Library/Frameworks/Python.framework' | awk '{print $9}' | xargs sudo rm

sudo rm -rf "/Applications/Python 2.7"

1) Python installation

* <https://www.python.org>
* Downloads -> Python 3.6.1
* Go to “Downloads” and install the software

2) Open python in terminal.

python2.7

python3.6

python Open the default python installation

Change the default python installation by using bash\_profile.

vim ~/.bash\_profile

and add

alias python='python3'

3) Install pip.

sudo easy\_install pip

4) Install TensorFlow in Mac. More datails in <https://www.tensorflow.org/install/>

pip install tensorflow # Python 2.7

pip3 install tensorflow # Python 3.x

You can add option ‘–-user’ to install it in users folder. Verify installation by running your first program in python

import tensorflow as tf

hello = tf.constant('Hello world!')

sess = tf.Session()

sess.run(hello)

If Step 1 failed, install the latest version of TensorFlow by issuing a command of the following format:

sudo pip install --upgrade TF\_BINARY\_URL # Python 2.7

sudo pip3 install --upgrade TF\_BINARY\_URL # Python 3.x

If installation failed again, try reinstalling it like this:

sudo pip uninstall tensorflow  
pip install [https://storage.googleapis.com/tensorflow/mac/cpu/tensorflow-1.0.1-py3-none-any.whl](https://storage.googleapis.com/tensorflow/mac/cpu/tensorflow-1.0.1-py3-none-any.whl" \t "_blank)

5) Install keras.

sudo pip install keras #For version 2.7

sudo pip3 install keras #For version 3.x

You can start by running your first Neural Network program in python

import numpy as np

from keras.models import Sequential

from keras.layers import Dense, Activation

x = np.random.uniform(-1,1,[1000,100])

b = np.random.normal(0,1,100)

e = np.random.normal(0,1,1000)

u = np.dot(x,b)

y = u + e

x\_train = x[range(200,1000),:]

x\_test = x[range(0,200),:]

y\_train = y[range(200,1000)]

y\_test = y[range(0,200)]

model = Sequential()

model.add(Dense(50,input\_dim=100,activation='relu'))

model.add(Dense(units=10))

model.add(Dense(units=1))

model.compile(loss='mean\_squared\_error',optimizer='adam')

model.fit(x\_train, y\_train, epochs=100, batch\_size=800)

yHat = model.predict(x\_test, batch\_size=800)[:,0]

np.corrcoef(y\_test,yHat)[0,1]