Installation and Assignment for "Deep Learning and Neural Networks" – IAP 2017

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1 OVERVIEW

This class requires the following software:

1. Python 2.7 (code will run with minor modification on 3.x [probably])
2. IPython/Jupyter
3. Numpy, Matplotlib, and TensorFlow packages

Important Note: TensorFlow is not available on Windows!

Well, it is kinda, there are some options out there (according to Googling), but I'd recommend saving yourself some pain and just using a Linux virtual machine. In particular, install VirtualBox and download a recent version of Ubuntu. Then you can just follow the installation instructions below.

2 ASSIGNMENT

Please execute the following code in Python or IPython and submit a screenshot showing it works (or copypaste the output, or whatever you feel is appropriate to demonstrate that you installed the software):

```
import tensorflow as tf
sess = tf.Session()
a = tf.constant(10)
b = tf.constant(32)
print "Answer to the Ultimate Question of Life,"
print "the Universe and Everything:", sess.run(a+b)
```

3 INSTALLING PYTHON

You should already have Python 2.7. Test by running `python`

*This course is largely adapted from Iain Dunning's 2016 version

4 INSTALLING IPYTHON

See if you have `pip` installed (by trying to run it). If you don't, try

```
sudo easy_install pip
```

Now you can do

```
sudo pip install jupyter
sudo pip install ipython
```

(This would be better with `virtualenv`, then you wouldnt need to `sudo` things, but, trying to keep this simple.) To test if it worked, run

```
ipython notebook
```

which should open your browser to the Jupyter interface.

5 INSTALLING NUMPY, MATPLOTLIB, & TENSORFLOW

For the first two, simply run

```
sudo pip install numpy
sudo pip install matplotlib
```

For **TensorFlow**, follow the commands at:

`https://www.tensorflow.org/versions/master/get_started/os_setup.html#pipinstallation`