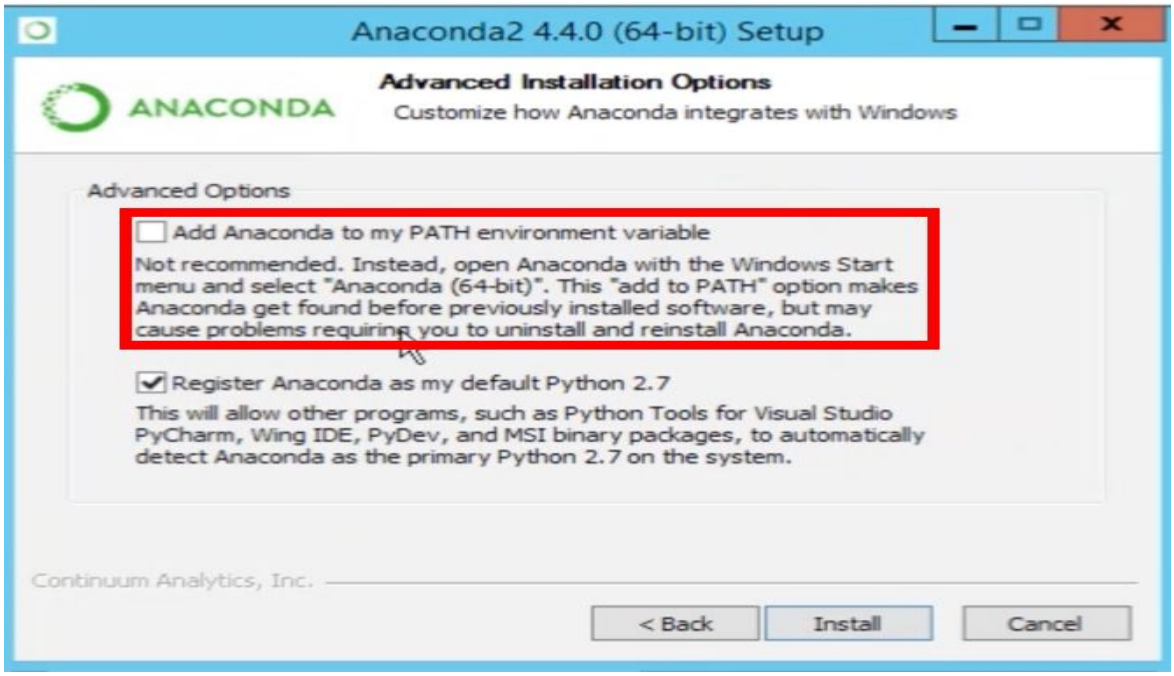
Install Python on Windows (Anaconda)

This tutorial is split into three sections. The first part is installing Anaconda. The second part is testing your installation (making sure conda works, dealing with path issues etc). Finally, the last part of the tutorial goes over installing packages, and environment management.

1. Download and install Anaconda (windows version) from https://www.anaconda.com/download/#windows
2. .Select the default options when prompted during the installation of Anaconda. Note: If you checked this box, steps 4 and 5 are not needed. The reason why it isn't preselected is a lot of people don't have administrative rights on their computers.

3. 

4. After you finished installing, open **Anaconda Prompt**. Type the command below to see that you can use a Jupyter (IPython) Notebook.
5. If you didn't check the add Anaconda to path argument during the installation process, you will have to add python and conda to your environment variables. You know you need to do so if you open a **command prompt** (not anaconda prompt) and get the following messages.

```
C:\Users\mgalarnyk>python
'python' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\mgalarnyk>jupyter notebook
'jupyter' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\mgalarnyk>conda list
'conda' is not recognized as an internal or external command,
operable program or batch file.
```

6. If you don't know where your conda and/or python is, you type the following commands into your **anaconda prompt.**

```
(C:\Users\mgalarnyk\Anaconda2) C:\Users\mgalarnyk>where python
C:\Users\mgalarnyk\Anaconda2\python.exe

(C:\Users\mgalarnyk\Anaconda2) C:\Users\mgalarnyk>where conda
C:\Users\mgalarnyk\Anaconda2\Scripts\conda.exe
```

7. You can add Python and Conda to your path by using the setx command in your **command prompt**.

```
C:\Users\mgalarnyk>SETX PATH "%PATH%;C:\Users\mgalarnyk\Anaconda2\Scripts;C:\Use
rs\mgalarnyk\Anaconda2"

SUCCESS: Specified value was saved.
```

8. Close the current command prompt and open a new one. Try typing python and conda in your **command prompt** to see if the paths are saved. Done!

Bonus for pip install

Conda is a package manager to manage virtual environment and install packages. Here are some helpful commands using conda:

```
# update conda in your default environment
```

```
$ conda upgrade conda
```

```
$ conda upgrade --all
```

I highly recommend you download and print out the Anaconda cheatcheet here

https://conda.io/docs/_downloads/conda-cheatsheet.pdf

Install TensorFlow (including Keras)

```
# install pip in the virtual environment

$ conda install pip

# install Tensorflow

$ pip3 install --upgrade tensorflow # for python 3.*

# install Keras (Note: please install TensorFlow first)
$ pip install Keras
#-install-Keras-(Note:-please-install-TensorFlow
-first)
- $-pip-install-Keras

# Alternatively, install multiple packages from a
requirements file
$ pip install -r requirements.txt
```

After installing TensorFlow you can verify its installation with python in command line:

Invoke python from your shell as follows:

```
# invoke python from your shell


$ python
# create a simple TensorFlow program inside the python
interactive shell
>>> import tensorflow as tf
>>> hello = tf.constant('Hello, TensorFlow!')
>>> sess = tf.Session()
>>> print(sess.run(hello))
# Exit the python shell
Ctrl+D
```

If you see `Hello, TensorFlow!` printed then it confirms that TensorFlow is stalled correctly.