

Joint Office of Research

Visual guide for installation instruction

For Mac OS X















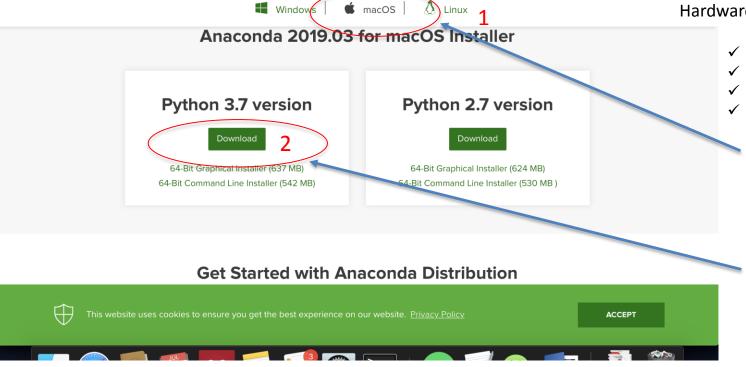








Go https://www.anaconda.com/distribution/
 and click on Download Python 3.7 version



Hardware Recommendation:

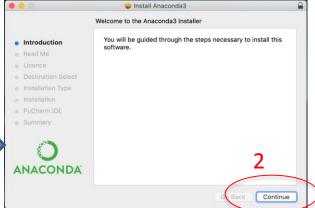
- ✓ CPU: i5 (64bit) or above
- ✓ Memory: 4Gb or above
- ✓ Internet enabled
- ✓ MacOS admin right

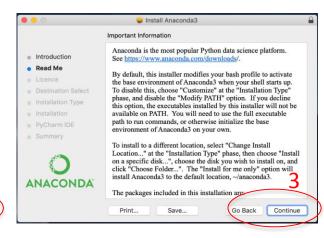
Click here for the macOS version

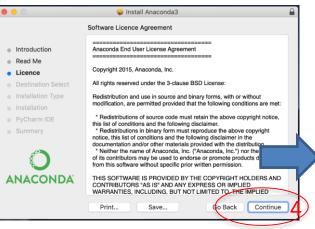
Download here for Python 3.7

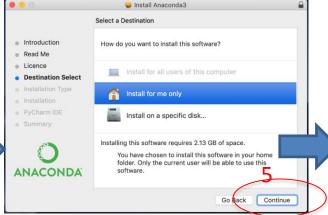


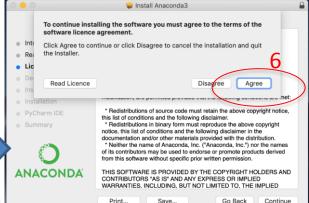


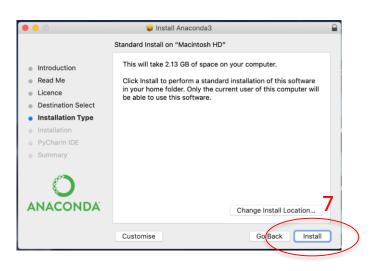




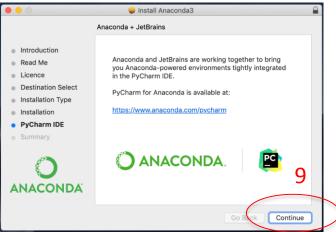




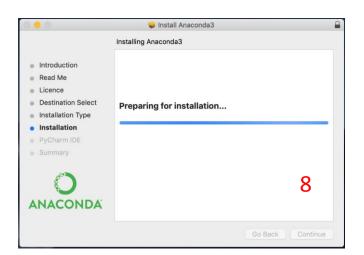


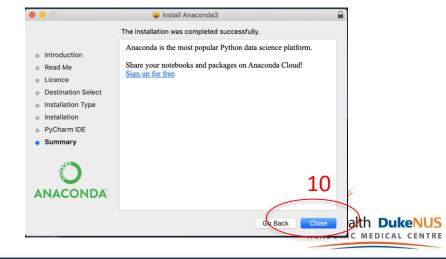




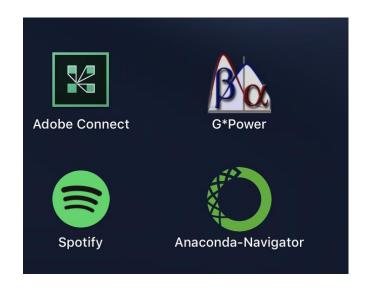








 Make sure you see the Anaconda Navigator Icon in your Launchpad



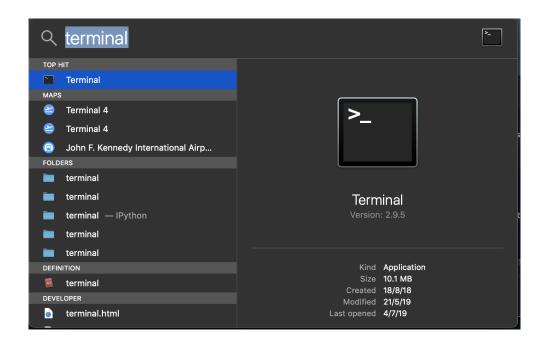
Now you have installed Anaconda



1.1 Open the macOS terminal

Cmd+Space bar to open Spotlight search

Type 'terminal' and open it





2. Create a Tensorflow environment in terminal

conda create -n tensorflow python=3.6

```
[(base) Ducs-MacBook-Pro:~ ducquangnguyen$ conda create -n tensorflow python=3.6
WARNING: The conda.compat module is deprecated and will be removed in a future r
elease.
Collecting package metadata: done
Solving environment: done

==> WARNING: A newer version of conda exists. <==
    current version: 4.6.11
   latest version: 4.7.5
Please update conda by running</pre>
```

Type this line into terminal

- Please wait for the installation to complete
- Note that we have to key in 'y' in order to proceed with installation

```
zlib pkgs/main/osx-64::zlib-1.2.11-h1de35cc_3
Proceed ([y]/n)? y
```



3. Activate your new environment:

conda activate tensorflow

Type this line into terminal

 You will see your prompt prepend (Tensorflow) to indicate that you are in your Tensorflow environment

```
[(base) Ducs-MacBook-Pro:~ ducquangnguyen$ conda activate tensorflow (tensorflow) Ducs-MacBook-Pro:~ ducquangnguyen$ ■
```

Prepend here! Now you are in Tensorflow



4. Install some prerequisite packages

conda install imageio numpy matplotlib jupyter spyder tqdm urllib3 h5py

```
(tensorflow) Ducs-MacBook-Pro:~ ducquangnguyen$ conda install imageio numpy matp
lotlib jupyter spyder tqdm urllib3 h5py
WARNING: The conda.compat module is deprecated and will be removed in a future r
elease.
Collecting package metadata: done
Solving environment: done

==> WARNING: A newer version of conda exists. <==
auxrent version: 6 6 11</pre>
```

Type this line into terminal

in Tensorflow environment you just activated

to key in 'y'



5. Install CPU version of TensorFlow

CPU

pip install --ignore-installed --upgrade into terminal https://storage.googleapis.com/tensorflow/mac/cpu/tensorflow-1.12.0-py3-none-any.whl

```
Verifying transaction: done

Verifying transaction: done

Executing transaction: done

(tensorflow) Ducs-MacBook-Pro:~ ducquangnguyen$ pip install --ignore-installed --upgrade https://storage.googleapis.com/tensorflow/mac/cpu/tensorflow-1.12.0-py3-none-any.wni
```

 The above only applies to CPU version. For the purposes of this demo though, the CPU version is sufficient.



Type this line

Verify TensorFlow Installation

- a) Enter: python
- b) Enter this program into your Python shell:

```
import tensorflow as tf
hello = tf.constant('Hello, TensorFlow!')
sess = tf.Session()
print(sess.run(hello))
```

```
(base) Ducs-MacBook-Pro:~ ducquangnguyen$ conda activate tensorflow
(tensorflow) Ducs-MacBook-Pro:~ ducquangnguyen$ python
[Python 3.6.8 | Anaconda, Inc.| (default, Dec 29 2018, 19:04:46)
[[GCC 4.2.1 Compatible Clang 4.0.1 (tags/RELEASE_401/final)] on darwin
Type "help", "copyright", "credits" or "license" for more information.
>>> import tensorflow as tf
>>> hello = tf.constant('Hello')
[>>> sess = tf.Session()
[2019-07-03 14:39:44.759518: I tensorflow/core/platform/cpu_feature_guard.cc:141] Your CPU supports instructions th
[t this TensorFlow binary was not compiled to use: AVX2 FMA
>>> print(sess.run(hello))
b'Hello'
>>> quit()
[(tensorflow) Ducs-MacBook-Pro:~ ducquangnguyen$
```

You just completed the installation!

