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Python Stack Python

Anaconda¹

Conda (anaconda.com) is an open source package management system and environment management system. Conda quickly installs, runs and updates packages and their dependencies. It easily creates, saves, loads and switches between environments on your local computer. It was created for Python programs, but it can package and distribute software for any language.

Conda as a package manager helps you find and install packages. If you need a package that requires a different version of Python, you do not need to switch to a different environment manager, because conda is also an environment manager. With just a few commands, you can set up a totally separate environment to run that different version of Python, while continuing to run your usual version of Python in your normal environment.



¹ https://conda.io/docs/

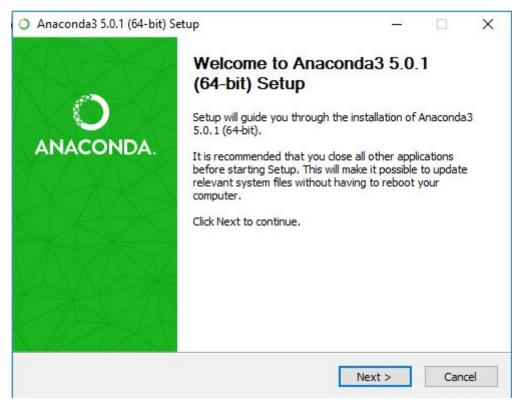
Python Installation

Download Anaconda²

- Download Anaconda by clicking the link:
 - https://repo.continuum.io/archive/Anaconda3-5.0.1-Windows-x86_64.exe
- Start the Anaconda Installation by double-clicking the Anaconda3-5.0.1-Windows-x86_64.exe file

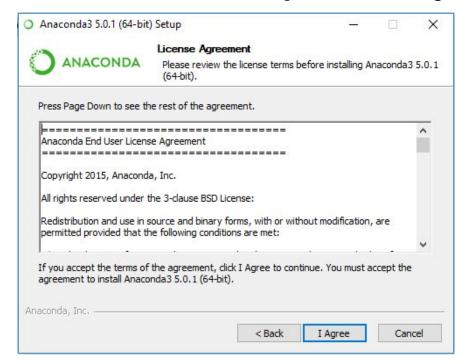


• The following screen will pop up and click "Next >".



² https://conda.io/docs/

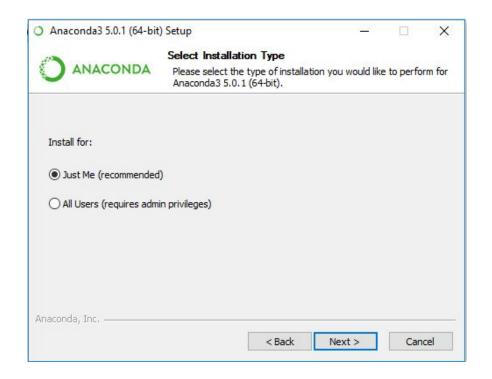
• You will then be asked about the License Agreement. Click "I Agree".



• You will then be asked for the Installation Type.

Select "Just Me (recommended)"

Click "Next >"

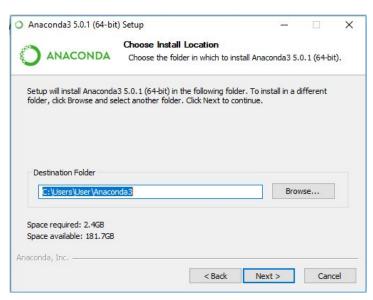




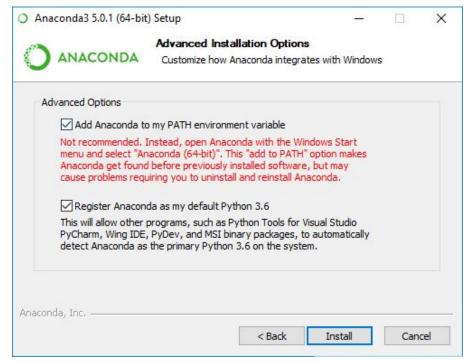
You will then be asked for a location where to install Anaconda.

You can leave it as the default.

Click "Next >"

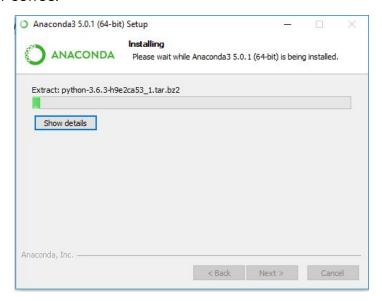


- IMPORTANT: You will then be asked for some Advanced Installation
 Options:
 - Check "Add Anaconda to my PATH environment variable"
 - Check "Register Anaconda as my default Python 3.6"
 - o Click "Install"

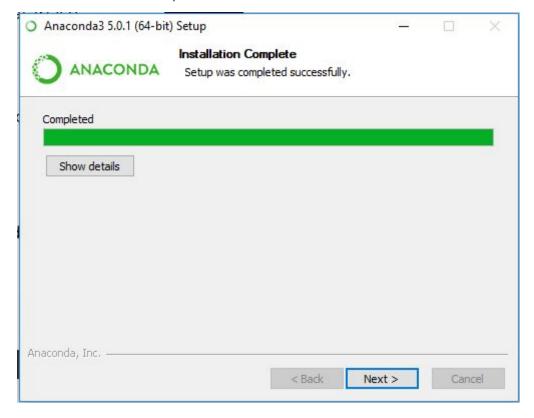




• The following installation screen will pop-up. Sit back and make a cup of tea or coffee.



• Once the installation is complete click "Next >".





• You will then have an option to "Learn more about Anaconda Cloud" and "Learn more about Anaconda Support". You can uncheck these and **finish** the installation.



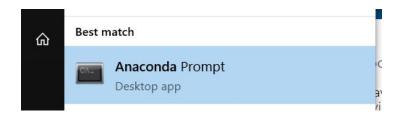


Update the Packages

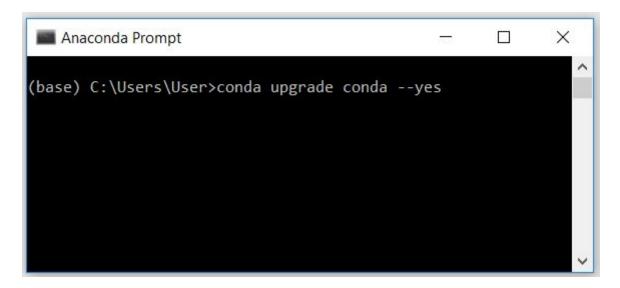
The packages that come with the initial install tend to be out of date, so updating them now will prevent future errors from out of date software.

To avoid errors later, it's best to update all the packages in the default environment.

• Open the Anaconda Prompt application.



In the prompt, run the following command to upgrade conda:
 conda upgrade conda --yes (press "Enter" to execute the command)





```
Anaconda Prompt
                                              X
onda-4.4.7-py
          80%
             Time: 0:00:04 177
conda-4.4.7-py 81% |#############################
                                    Time: 0:00:04 175
             conda-4.4.7-py 83%
                                    Time: 0:00:04 174
conda-4.4.7-py
          85%
             Time: 0:00:04
                                             171
conda-4.4.7-py
          86%
             Time: 0:00:05
conda-4.4.7-py
                                    Time: 0:00:05 161
          88%
             conda-4.4.7-py
          90%
             Time: 0:00:05 155
conda-4.4.7-py
          91%
             Time: 0:00:05 153
                                    Time: 0:00:06 149
conda-4.4.7-py 93%
             conda-4.4.7-py
          95%
             \++++++
                                    Time: 0:00:06
conda-4.4.7-py
          97%
             Time: 0:00:06 145
conda-4.4.7-py
          98%
             Time: 0:00:06 138
conda-4.4.7-py 100%
             Time: 0:00:06 140
conda-4.4.7-py 100% |##############################|
                                   Time: 0:00:06 140
.71 kB/s
(C:\Users\User\Anaconda3) C:\Users\User>
```

Wait until the prompt finishes upgrading conda.

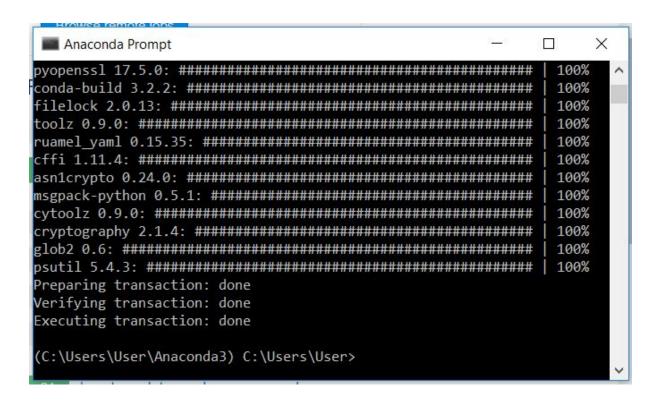
• In the prompt, run the following command to upgrade the python packages:

conda upgrade --all --yes (press "Enter" to execute the command)

```
Anaconda Prompt
                                        X
conda-4.4.7-py
                                  Time: 0:00:04 177 ^
         80%
             conda-4.4.7-py
                                  Time: 0:00:04 175
         81%
             conda-4.4.7-py
          83%
             Time: 0:00:04 174
         85%
                                  Time: 0:00:04 171
conda-4.4.7-py
             conda-4.4.7-py
         86%
                                  Time: 0:00:05 164
             Time: 0:00:05 161
conda-4.4.7-py 88%
             conda-4.4.7-py 90%
             Time: 0:00:05 155
conda-4.4.7-py 91%
                                  Time: 0:00:05 153
             conda-4.4.7-py
         93%
             Time: 0:00:06 149
conda-4.4.7-py
         95%
             Time: 0:00:06 146
conda-4.4.7-py
         97%
             Time: 0:00:06 145
conda-4.4.7-py 98%
             Time: 0:00:06 138
conda-4.4.7-py 100%
             ####################################
                                  Time: 0:00:06 140
conda-4.4.7-py 100%
            Time: 0:00:06 140
.71 kB/s
(C:\Users\User\Anaconda3) C:\Users\User>conda upgrade --all
```

Wait until the prompt finishes upgrading all of the packages.





Troubleshooting

conda command not found

If you are seeing the following "conda command not found" and are using ZShell, you have to do the following:

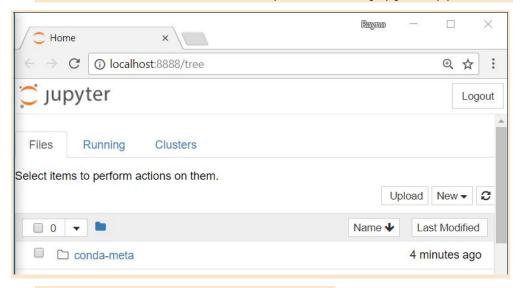
Add export PATH="/Users/<YOUR USERNAME>/anaconda/bin:\$PATH" to your .zsh_config file.



The Zen of Python

Make sure you download the "The Zen of Python" notebook from Athena.

- Open the Anaconda Prompt
- 2. Run jupyter notebook
 - a. A new browser window will open with the jupyter application.



- b. click "Upload" in the top right corner.
- c. Open the "The Zen of Python" notebook you just downloaded.
- 3. Find, and click on the **The Zen of Python notebook** that you just uploaded to jupyter in the list of documents.
- 4. Run the cell "Import this" by clicking inside it and pressing **shift + enter**.



Read and enjoy!

Jupyter notebooks will be the core of the coding material for the rest of the course. We hope you find it as awesome as we do!

Please note that you will need to do the first three steps above every time you open a notebook. Also notice that the jupyter notebook "root" directory will be the same as the file path in the command prompt where you run step 3 from.

