# AIS TD WS 2: Installation Instruction - **Python & Jupyter Notebook in Anaconda**



## **Pre-Installation Information**

# What is Python?

- **Python** is an interpreted, high-level, general-purpose programming language.
- Python supports the use of modules and packages, which means that
  programs can be designed in a modular style and code can be reused across a
  variety of projects. Once you've developed a module or package you need, it
  can be scaled for use in other projects, and it's easy to import or export these
  modules.

#### What is Jupyter Notebook?

- The **Jupyter Notebook** is an open-source web application that allows you to create and share documents that contain live code, equations, visualizations and narrative text.
- Jupyter Notebooks are a powerful way to write and iterate on your Python code for data analysis. Rather than writing and re-writing an entire program, you can write lines of code and run them one at a time.

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#### What is Anaconda?

- **Anaconda** is a free and open-source distribution of the Python and R programming languages for scientific computing, that aims to simplify package management and deployment.
- In this workshop, we will use Anaconda to Install Python and Jupyter Notebook as Anaconda also includes other commonly used packages for scientific computing and data science (and in this case, for text analytics!)

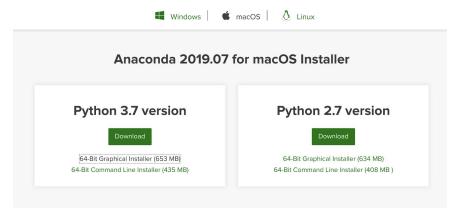
#### Notes:

• If you have any questions or issues in installing Anaconda, please contact Nhi at <a href="mailto:nhi@temple.edu">nhi@temple.edu</a> or Michelle at <a href="mailto:michelle.purnama@temple.edu">michelle.purnama@temple.edu</a> for more instructions.

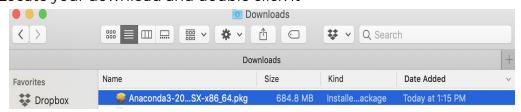
#### Installation Instruction

## 1) For MAC Users:

- Go to https://www.anaconda.com/distribution/
- Make sure you download the latest version of Python: **Python 3.7 version**.
  - Do not download Python 2 version, go for **Python 3** version!
  - Select the Graphical Installer

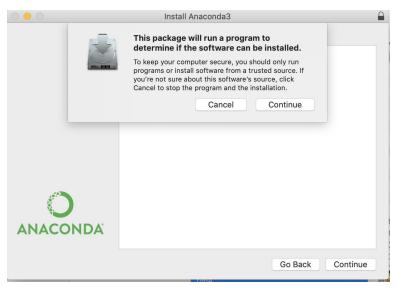


• Locate your download and double click it

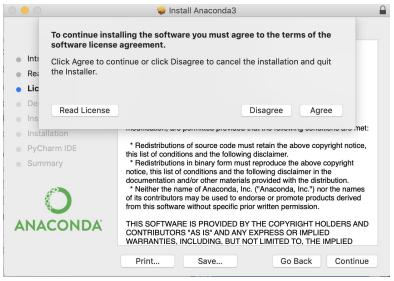


• Click on Continue

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• You will need to read and click Agree to the license agreement before clicking on **Continue** again.



• Keep clicking **Continue** until you are prompted to give your password. The password is usually the one that you also use to unlock your Mac when you start it up. After you enter your password, click on **Install Software**.

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• You should get a screen saying the installation is completed. Close the installer and move it to the trash.

#### **Test Your Installation**

 Open a **new terminal** on your Mac. You can do this by clicking on the Spotlight magnifying glass at the top right of the screen, type "terminal" then click on the terminal icon. Now, type the following command into your terminal

python --version

• You should get an output similar to this:

```
michellepurnama — -bash — 80×24

Last login: Tue Oct 8 13:23:38 on ttys000

[(base) 38-f9-d3-a9-08-7f:~ michellepurnama$ python --version

Python 3.7.3

(base) 38-f9-d3-a9-08-7f:~ michellepurnama$
```

- Open a Jupyter Notebook by typing the command below in your terminal jupyter notebook
- You should get an output similar to this:

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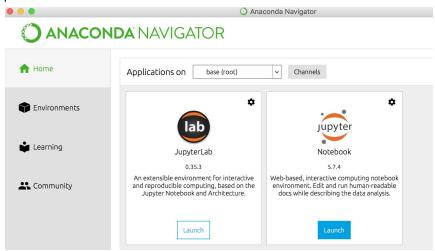
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```
nichellepurnama — jupyter-notebook — 80×24
Last login: Tue Oct 8 13:23:38 on ttys000
[(base) 38-f9-d3-a9-08-7f:~ michellepurnama$ python --version
Python 3.7.3
[(base) 38-f9-d3-a9-08-7f:~ michellepurnama$ jupyter notebook
[I 13:25:28.143 NotebookApp] JupyterLab extension loaded from //anaconda3/lib/py
thon3.7/site-packages/jupyterlab
[I 13:25:28.143 NotebookApp] JupyterLab application directory is //anaconda3/sha
re/jupyter/lab
   13:25:28.145 NotebookApp] Serving notebooks from local directory: /Users/mich
ellepurnama
[I 13:25:28.145 NotebookApp] The Jupyter Notebook is running at:
[I 13:25:28.145 NotebookApp] http://localhost:8888/?token=e415ed43466f8b5e205711
16f1235ccd366f4bfe2bdbda59
                              or http://127.0.0.1:8888/?token=e415ed43466f8b5e20
571116f1235ccd366f4bfe2bdbda59
[I 13:25:28.145 NotebookApp] Use Control-C to stop this server and shut down all
 kernels (twice to skip confirmation).
[C 13:25:28.152 NotebookApp]
    To access the notebook, open this file in a browser:
        file:///Users/michellepurnama/Library/Jupyter/runtime/nbserver-3104-open
.html
    Or copy and paste one of these URLs:
        http://localhost:8888/?token=e415ed43466f8b5e20571116f1235ccd366f4bfe2bd
```

 Jupyter Notebook should launch in your web browser. Now we're ready to start the workshop!

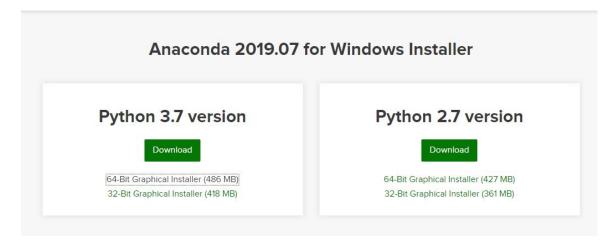


 Another way for you to launch Jupyter Notebook is to open Anaconda app (the one you just downloaded) and click **Launch** Jupyter Notebook and it should appear similar to the screenshot above



# 2) For Windows Users:

- Go to this link to download Anaconda: <a href="https://www.anaconda.com/distribution/">https://www.anaconda.com/distribution/</a>, press on "Download"
- There are two versions available, Python 3.7 and Python 2.7. Depending on your Windows version (either 32-bit or 64-bit), choose the appropriate Graphic Installer for Python 3.7
  - o To figure out which version of Windows you are having, do the following steps:
    - Open your File Explorer, right click on This PC, choose
       Properties
    - Check **System** type listed under "System". You will see something like "64-bit Operating System" or "32-bit Operating System"



Locate your download and double click it



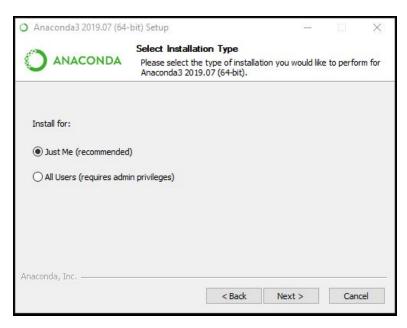
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• Click "Next" to continue



- Click "I Agree" to continue
- Choose "Just Me (recommended)" so that the software will only be installed for your account on the computer only. Click "Next" to continue.



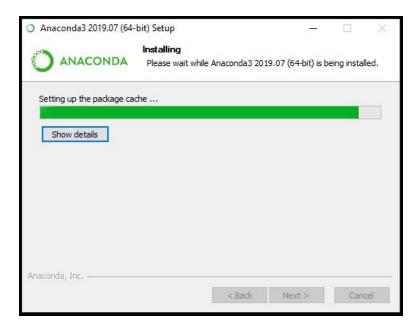
• The installation will ask for a Destination Folder to install the software. Keep the default value and click "**Next**"

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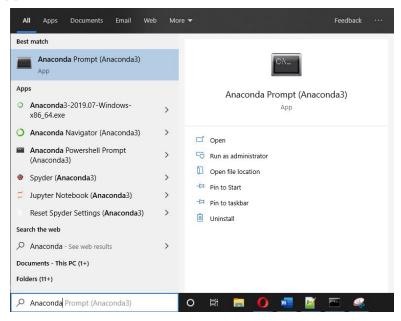
• In the Advanced Options, keep all the options as default, then press "Install"



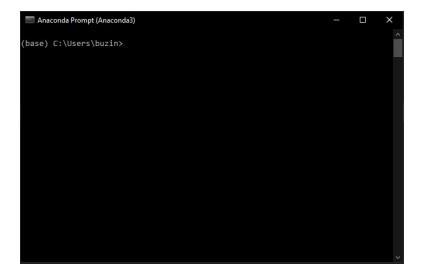
• Depending on your computer, this process could take up to 5 minutes



After the installation is finished. Press Windows, then in your search box, type
 "Anaconda"



- o Choose "Anaconda Prompt" then hit enter
- You will see something like this, with the word "(base)" at the beginning of each line



- o Type "jupyter notebook" then hit enter.
- o If your default internet browser does not turn on by itself, look again at your command line window, you will see lots of information printed out, but the line you need to use is here:

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```
Anaconda Prompt (Anaconda3) - jupyter notebook
   11:32:36.687 NotebookApp] Serving notebooks from local directory: C:\Users\buzin
I 11:32:36.687 NotebookApp] The Jupyter Notebook is running at:
I 11:32:36.687 NotebookApp http://localhost:8888/?token=4662c7b1ad58097052a0d29f9889b1655265f21a425e22c
[I 11:32:36.688 NotebookApp] or http://127.0.0.1:8888/?token=4662c7b1ad58097052a0d29f9889b1655265f21a425
[I 11:32:36.688 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip c
onfirmation).
[C 11:32:36.771 NotebookApp]
    To access the notebook, open this file in a browser:
        file:///C:/Users/buzin/AppData/Roaming/jupyter/runtime/nbserver-12708-open.html
    Or copy and paste one of these URLs:
        http://localhost:8888/?token=4662c7b1ad58097052a0d29f9889b1655265f21a425e22cc
     or http://127.0.0.1:8888/?token=4662c7b1ad58097052a0d29f9889b1655265f21a425e22cc
[E 11:32:38.352 NotebookApp] Could not open static file
[W 11:32:38.401 NotebookApp] 404 GET /static/components/react/react-dom.production.min.js (::1) 11.97ms r
eferer=http://localhost:8888/tree?token=4662c7b1ad58097052a0d29f9889b1655265f21a425e22cc
[W 11:32:38.437 NotebookApp] 404 GET /static/components/react/react-dom.production.min.js (::1) 2.00ms re
.
Ferer=http://localhost:8888/tree?token=4662c7b1ad58097052a0d29f9889b1655265f21a425e22cc
[I 11:34:41.995 NotebookApp] 302 GET / (::1) 0.99ms
[I 11:34:41.999 NotebookApp] 302 GET /tree? (::1) 0.00ms
[W 11:34:42.041 NotebookApp] 404 GET /static/components/react/react-dom.production.min.js (::1) 3.99ms re
ferer=http://localhost:8888/login?next=%2Ftree%3F
```

- o Copy all the URL started with "<a href="http://localhost:8888/?token=.....">http://localhost:8888/?token=.....</a> and paste it to your internet browser
- o Or else, if everything is working well, you will see something like this, meaning that Anaconda is successfully installed, as well as your Jupyter Notebook!

