

Python102

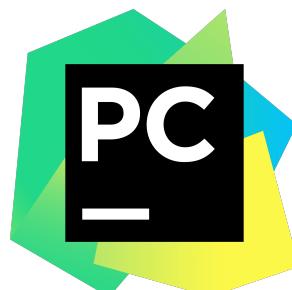
Python for Data Science Bootcamp

(1) Python Environment Set-up

AIAT Academy

Environment Set-up

- Latest version of Python (3.7.x) will be used for this course.
- You are free to use any development environment you prefer
 - Python IDE (PyCharm, Sublime Text, etc.)
 - Local Environment for Python Programming (Jupyter Notebook)
 - Cloud Environment for Python Programming (Google Colab)



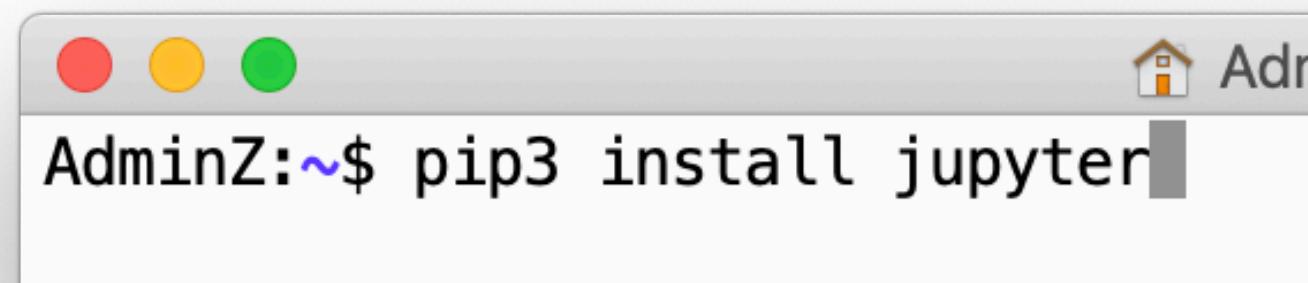
Experience users who already have Python

- To install Jupyter, existing Python user may use **pip** (Python's Package Manager) to install Jupyter
- Just go to your command prompt or terminal and use:

pip3 install jupyter

or

pip install jupyter



Recommended: New Users

- For new users, we highly recommend installing Anaconda.
Anaconda conveniently installs Python, the Jupyter Notebook, and other commonly used packages for scientific computing and data science.
- Let's go to www.jupyter.org



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jupyter

*Spark*



Prerequisite: Python

While Jupyter runs code in many programming languages, Python is a requirement (Python 3.3 or greater, or Python 2.7) for installing the Jupyter Notebook itself.

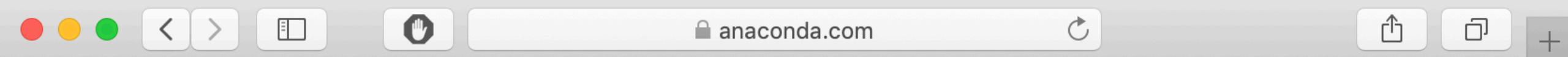
Installing Jupyter using Anaconda

We **strongly recommend** installing Python and Jupyter using the [Anaconda Distribution](#), which includes Python, the Jupyter Notebook, and other commonly used packages for scientific computing and data science.

First, download [Anaconda](#). We recommend downloading Anaconda's latest Python 3 version.

Second, install the version of Anaconda which you downloaded, following the instructions on the download page.

Congratulations, you have installed Jupyter Notebook! To run the notebook, run the following command at the Terminal (Mac/Linux) or Command Prompt (Windows):



Windows



macOS



Linux

Anaconda 2018.12 For macOS Installer

Python 3.7 version *

 Download

[64-Bit Graphical Installer \(652.7 MB\)](#) 

[64-Bit Command-Line Installer \(557 MB\)](#) 



Advanced Installation Options

Customize how Anaconda integrates with Windows

Advanced Options

For windows only

- Add Anaconda to my PATH environment variable

Not recommended. Instead, open Anaconda with the Windows Start menu and select "Anaconda (64-bit)". This "add to PATH" option makes Anaconda get found before previously installed software, but may cause problems requiring you to uninstall and reinstall Anaconda.

- Register Anaconda as my default Python 3.7

This will allow other programs, such as Python Tools for Visual Studio PyCharm, Wing IDE, PyDev, and MSI binary packages, to automatically detect Anaconda as the primary Python 3.7 on the system.



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Applications on

base (root)

Channels

Refresh



JupyterLab
0.35.3

An extensible environment for interactive and reproducible computing, based on the Jupyter Notebook and Architecture.

[Launch](#)



Notebook
5.7.4

Web-based, interactive computing notebook environment. Edit and run human-readable docs while describing the data analysis.

[Launch](#)



Qt Console
4.4.3

PyQt GUI that supports inline figures, proper multiline editing with syntax highlighting, graphical calltips, and more.

[Launch](#)



Spyder
3.3.2

Scientific PYthon Development EnviRonment. Powerful Python IDE with advanced editing, interactive testing, debugging and introspection features

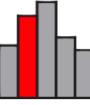
[Launch](#)



VS Code
1.30.2

Streamlined code editor with support for development operations like debugging, task running and version control.

[Launch](#)



Glueviz
0.13.3

Multidimensional data visualization across files. Explore relationships within and among related datasets.

[Install](#)



Orange 3
3.17.0

Component based data mining framework. Data visualization and data analysis for novice and expert. Interactive workflows with a large toolbox.

[Install](#)



RStudio
1.1.456

A set of integrated tools designed to help you be more productive with R. Includes R essentials and notebooks.

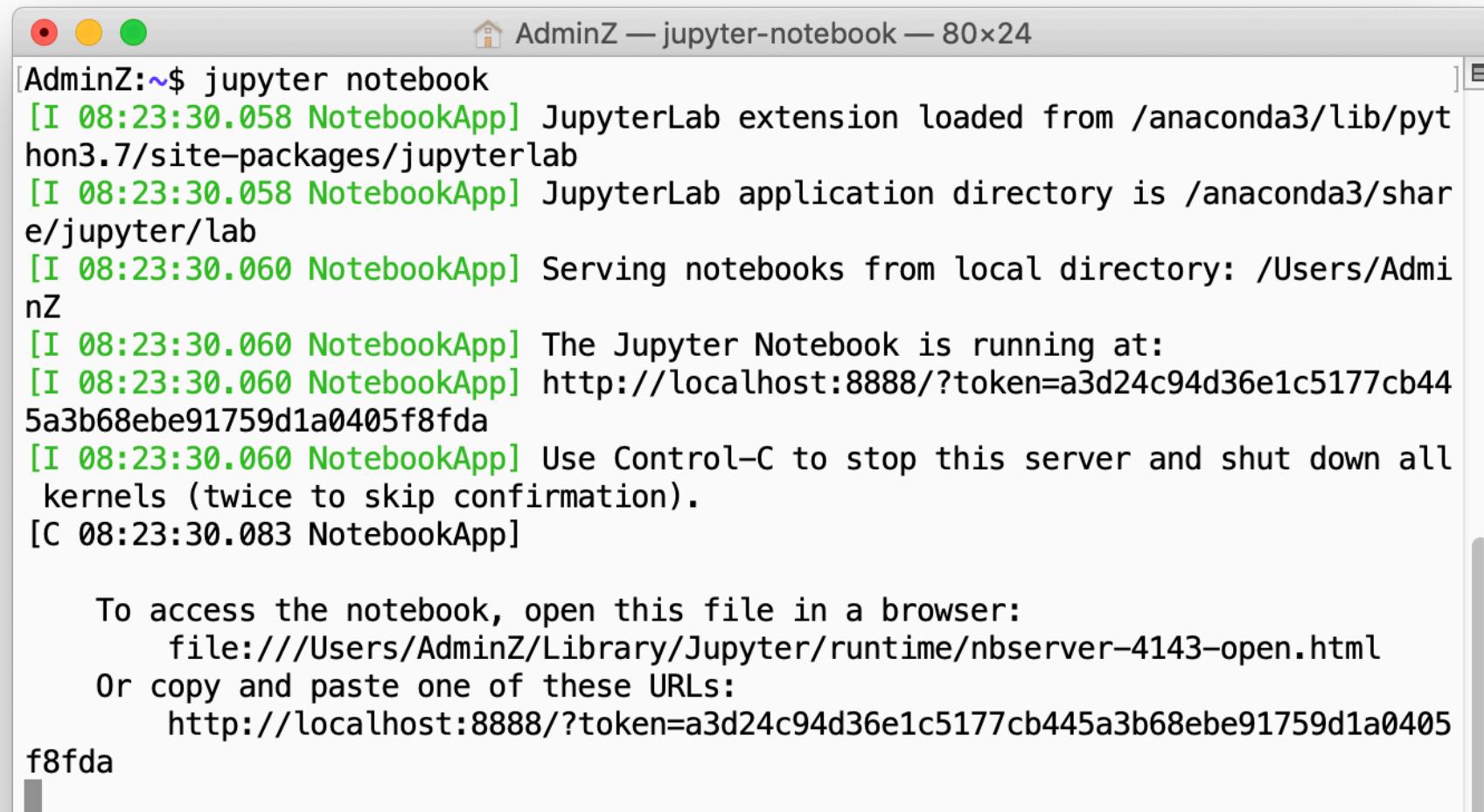
[Install](#)



Environment Set-up

- Let's go to command prompt or terminal and use:

jupyter notebook

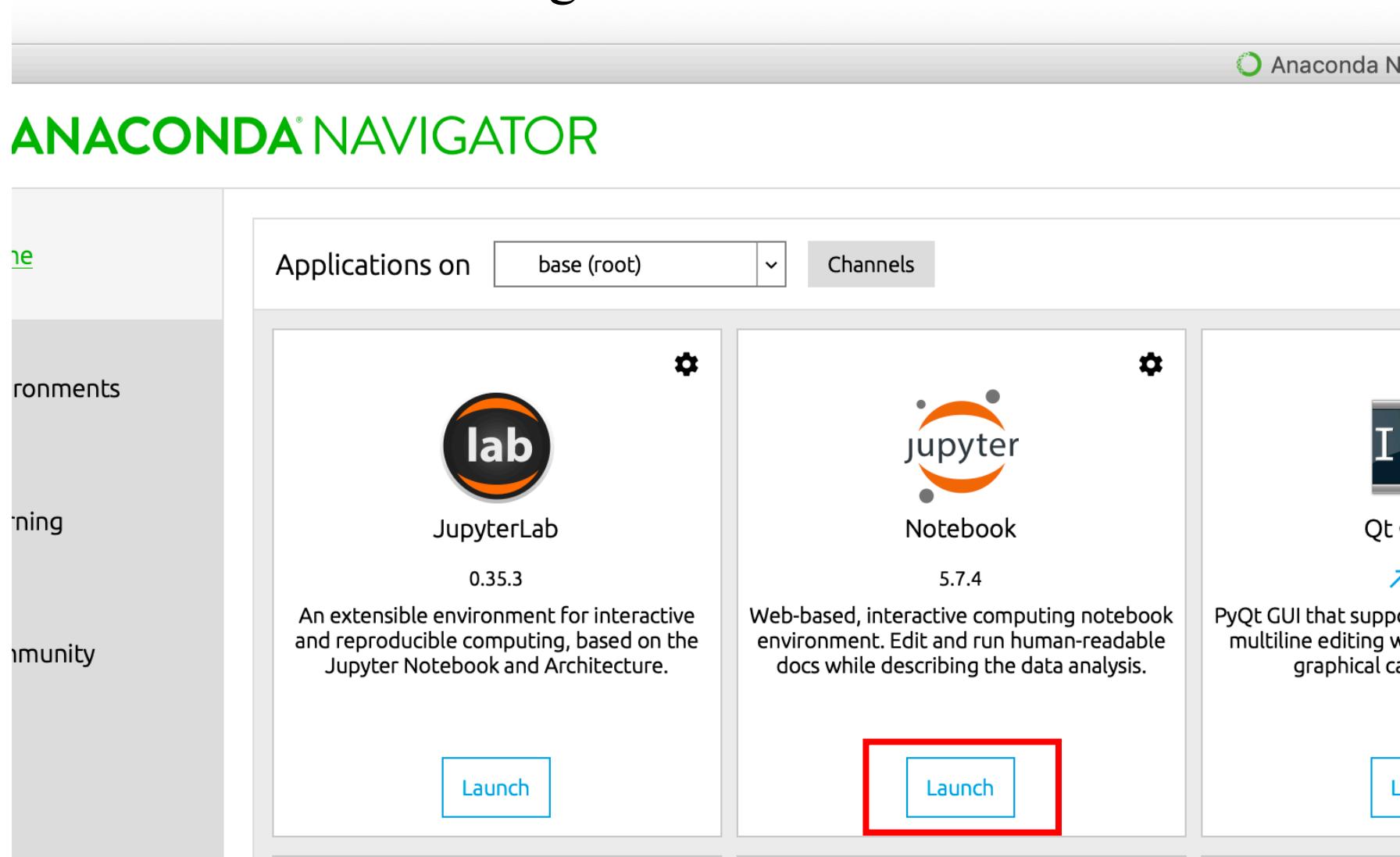


```
[AdminZ:~$ jupyter notebook
[I 08:23:30.058 NotebookApp] JupyterLab extension loaded from /anaconda3/lib/python3.7/site-packages/jupyterlab
[I 08:23:30.058 NotebookApp] JupyterLab application directory is /anaconda3/share/jupyter/lab
[I 08:23:30.060 NotebookApp] Serving notebooks from local directory: /Users/AdminZ
[I 08:23:30.060 NotebookApp] The Jupyter Notebook is running at:
[I 08:23:30.060 NotebookApp] http://localhost:8888/?token=a3d24c94d36e1c5177cb445a3b68ebe91759d1a0405f8fda
[I 08:23:30.060 NotebookApp] Use Control-C to stop this server and shut down all
kernels (twice to skip confirmation).
[C 08:23:30.083 NotebookApp]

To access the notebook, open this file in a browser:
file:///Users/AdminZ/Library/Jupyter/runtime/nbserver-4143-open.html
Or copy and paste one of these URLs:
http://localhost:8888/?token=a3d24c94d36e1c5177cb445a3b68ebe91759d1a0405f8fda
```

Environment Set-up

- Or launch on Anaconda Navigator



localhost

Quit Logout

Files Running Clusters

Select items to perform actions on them.

Upload New ↘

	Name ↓	Last Modified	File size
<input type="checkbox"/> 0	/		
<input type="checkbox"/>	Applications	17 hours ago	
<input type="checkbox"/>	Applications (Parallels)	6 months ago	
<input type="checkbox"/>	Bit Received	a month ago	
<input type="checkbox"/>	cali_core3	a year ago	
<input type="checkbox"/>	Desktop	2 days ago	
<input type="checkbox"/>	Documents	3 months ago	
<input type="checkbox"/>	Downloads	17 minutes ago	
<input type="checkbox"/>	Dropbox	3 months ago	
<input type="checkbox"/>	Favorite	6 months ago	