

实验环境配置Anaconda+Jupyter

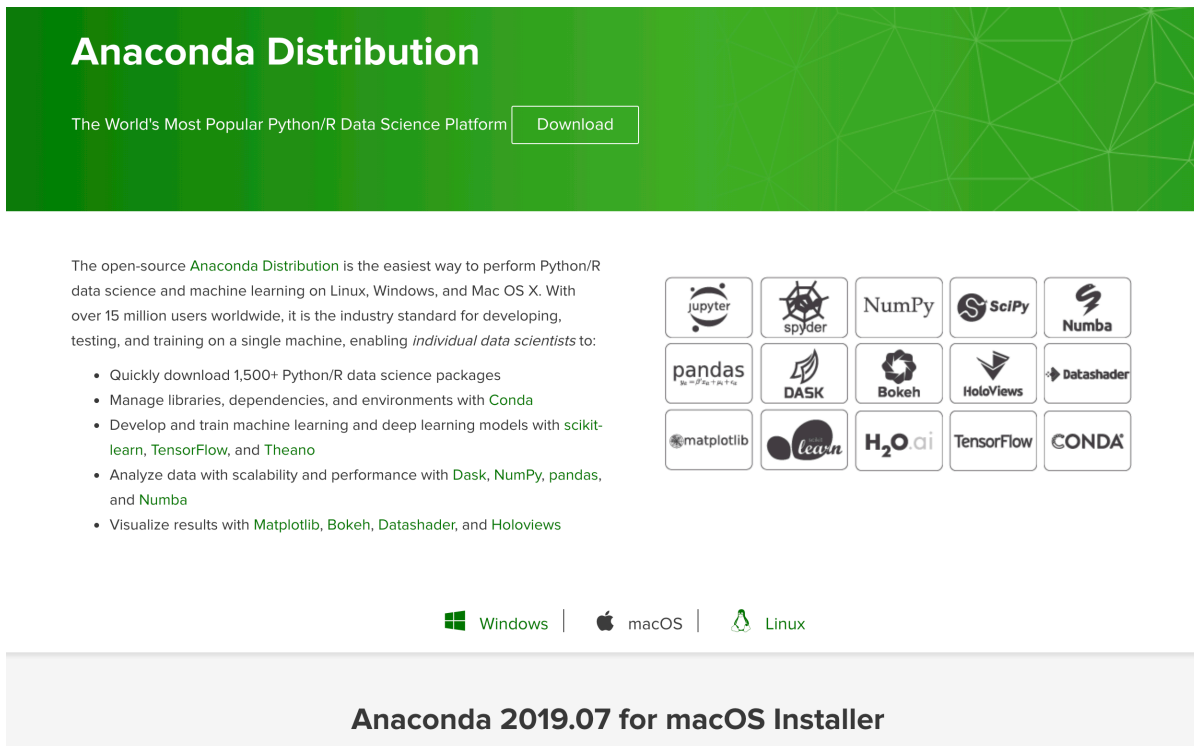
简介

- 工欲善其事，必先利其器。在本节课程的上机实验过程中我们会使用Python作为我们的主要编程语言，Python是一种功能强大、易于使用并在越来越多的领域中起到重要作用。
- 虽然Python非常易用，但是包管理和Python不同版本问题却让人非常头疼，纠结于这些问题会分散我们学习这门课程的注意力。而Anaconda有着强大的包管理与环境管理功能，可以用于在同一个机器上安装不同版本的软件包及其依赖，并能够在不同的环境之间切换。本文主要分别介绍Windows和MacOS两种操作系统下Anaconda的安装与Jupyter环境配置。

Windows环境

下载安装包

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Anaconda Distribution

The World's Most Popular Python/R Data Science Platform [Download](#)

The open-source **Anaconda Distribution** is the easiest way to perform Python/R data science and machine learning on Linux, Windows, and Mac OS X. With over 15 million users worldwide, it is the industry standard for developing, testing, and training on a single machine, enabling *individual data scientists* to:

- Quickly download 1,500+ Python/R data science packages
- Manage libraries, dependencies, and environments with **Conda**
- Develop and train machine learning and deep learning models with **scikit-learn**, **TensorFlow**, and **Theano**
- Analyze data with scalability and performance with **Dask**, **NumPy**, **pandas**, and **Numba**
- Visualize results with **Matplotlib**, **Bokeh**, **Datashader**, and **Holoviews**



 Windows |  macOS |  Linux

Anaconda 2019.07 for macOS Installer

- 选择对应你系统的版本,这里我们选择Python3.7版本 64-Bit Graphical Installer.(意为带图形界面版本)

Anaconda 2019.07 for Windows Installer

Python 3.7 version

Download

64-Bit Graphical Installer (486 MB)
32-Bit Graphical Installer (418 MB)

Python 2.7 version

Download

64-Bit Graphical Installer (427 MB)
32-Bit Graphical Installer (361 MB)

- 运行安装程序



- 同意协议



License Agreement

Please review the license terms before installing Anaconda3 2019.07 (64-bit).

Press Page Down to see the rest of the agreement.

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Anaconda End User License Agreement

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Copyright 2015, Anaconda, Inc.

All rights reserved under the 3-clause BSD License:

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install Anaconda3 2019.07 (64-bit).

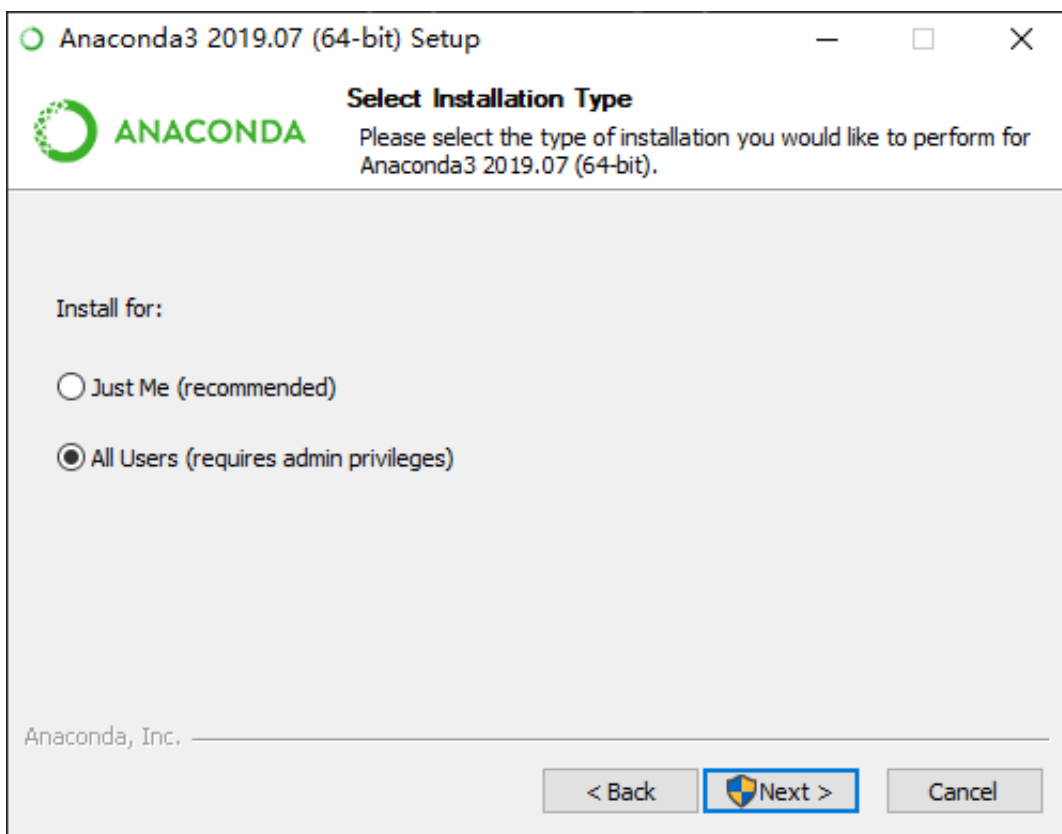
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< Back

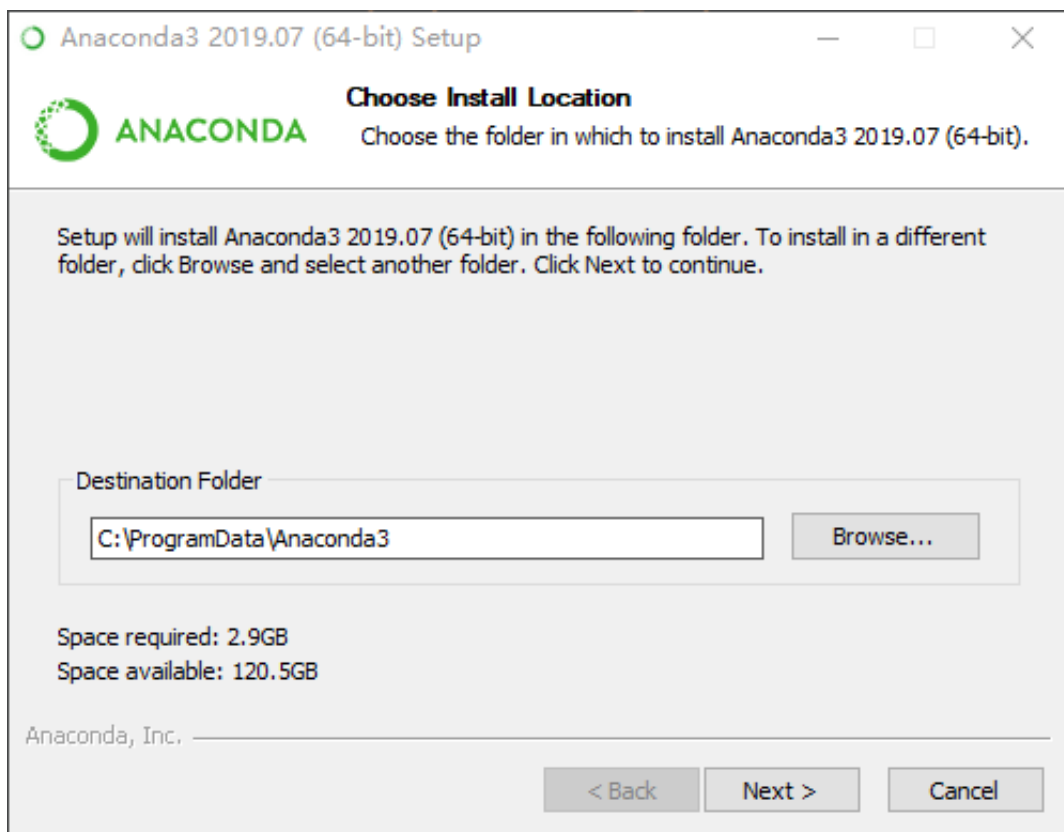
I Agree

Cancel

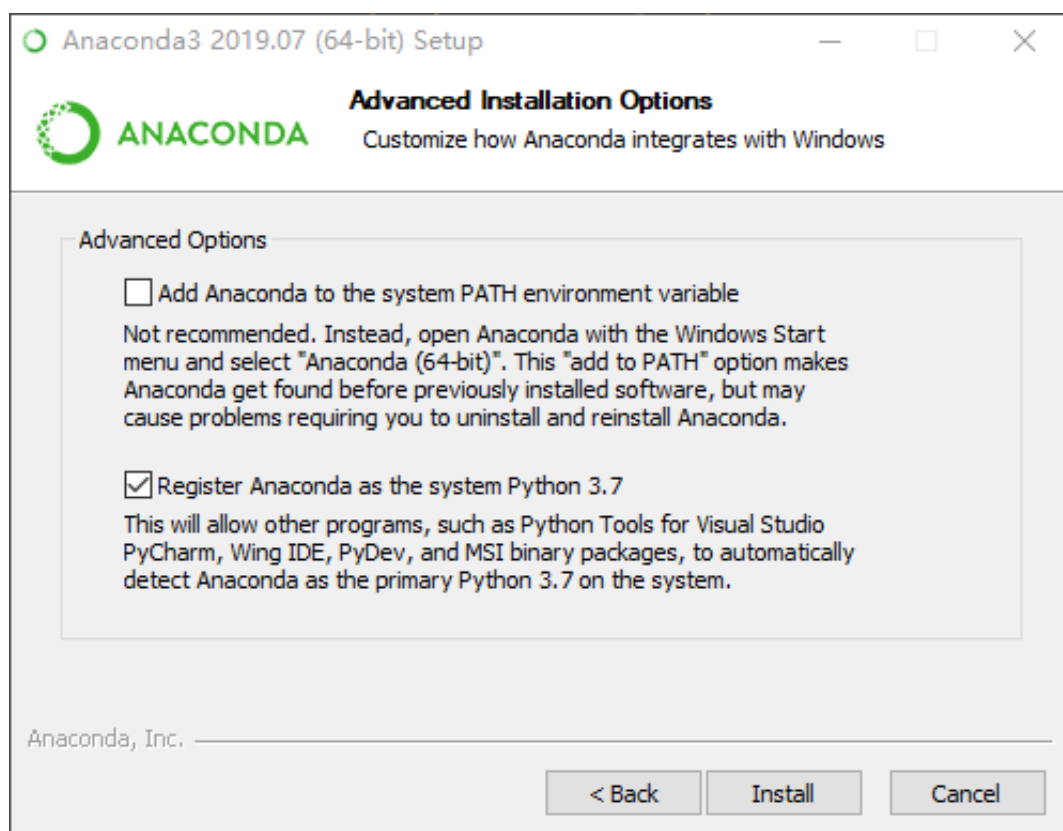
- 此处选择All Users，并在弹出安全性提示时点同意(如果你有多个用户的话这样会方便一些)



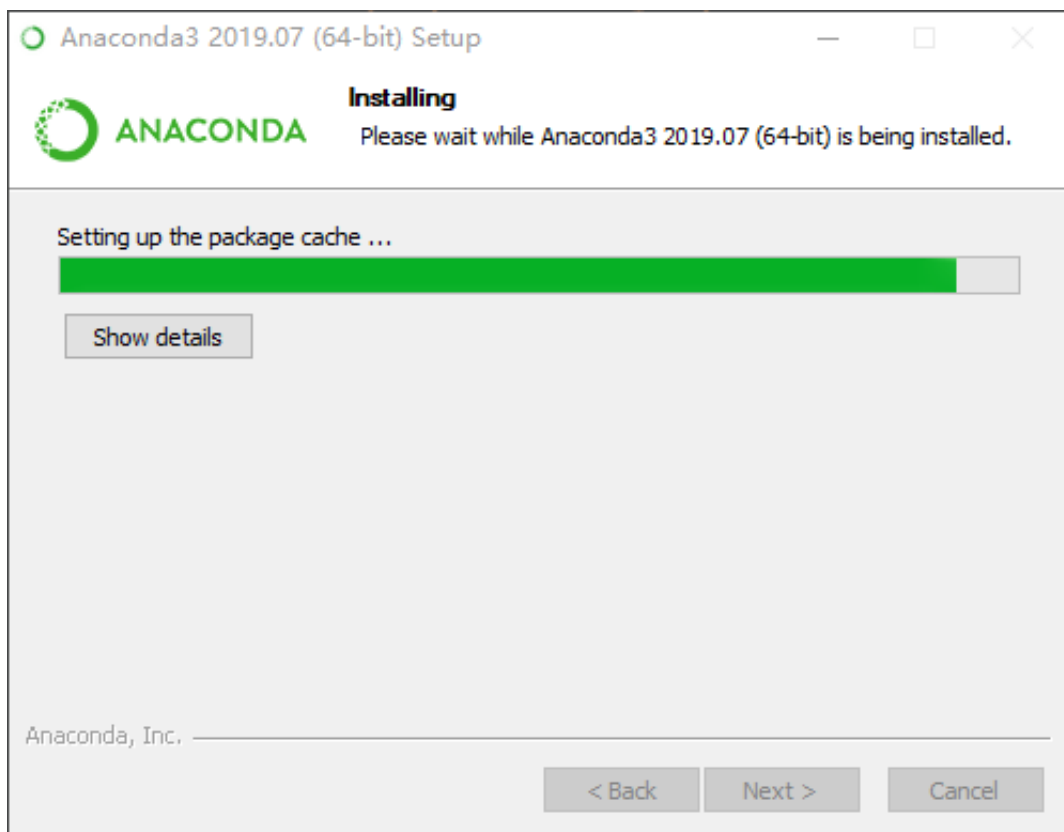
- 选择你想要安装的位置(默认即可)



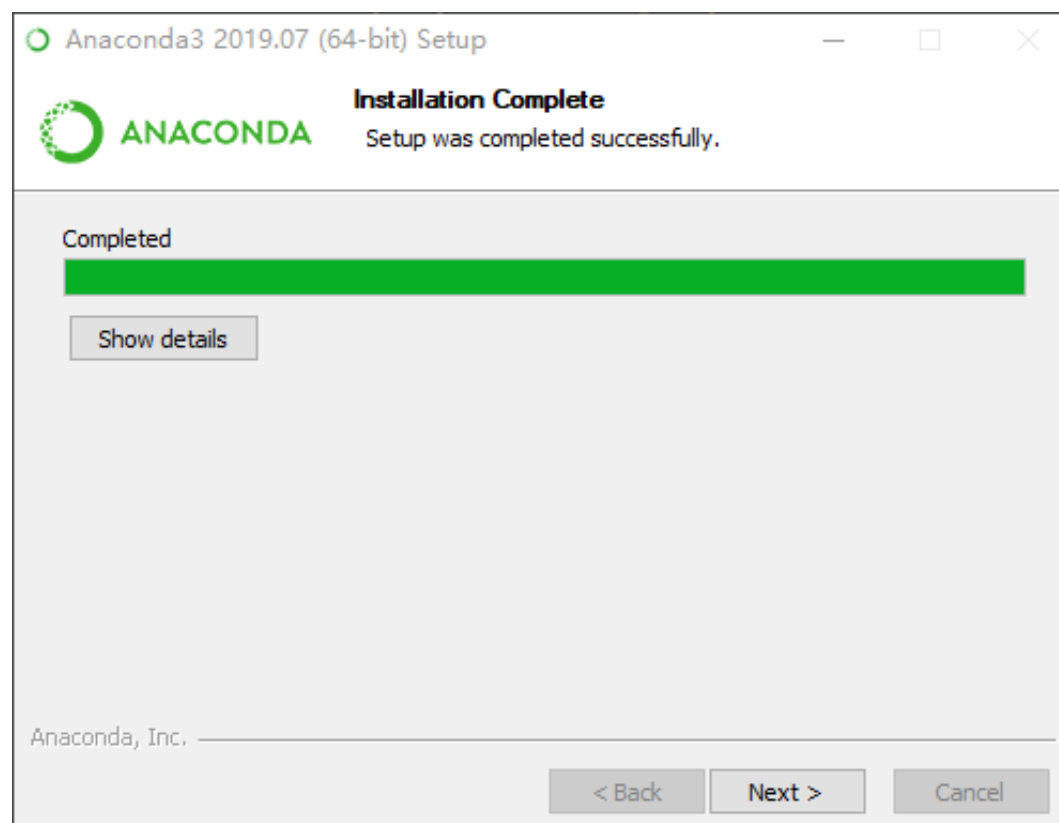
- 勾选第二个选项，不要勾选第一个选项



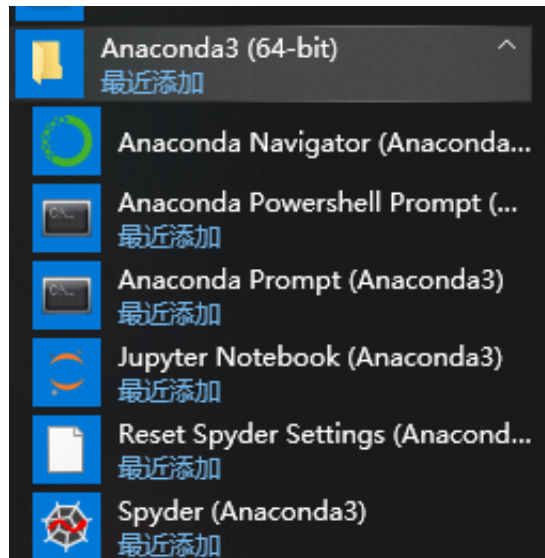
- 等待安装 (视不同计算机情况，时间可能长短不一，进度条会在最后5%左右卡住是正常现象，稍事等待即可)



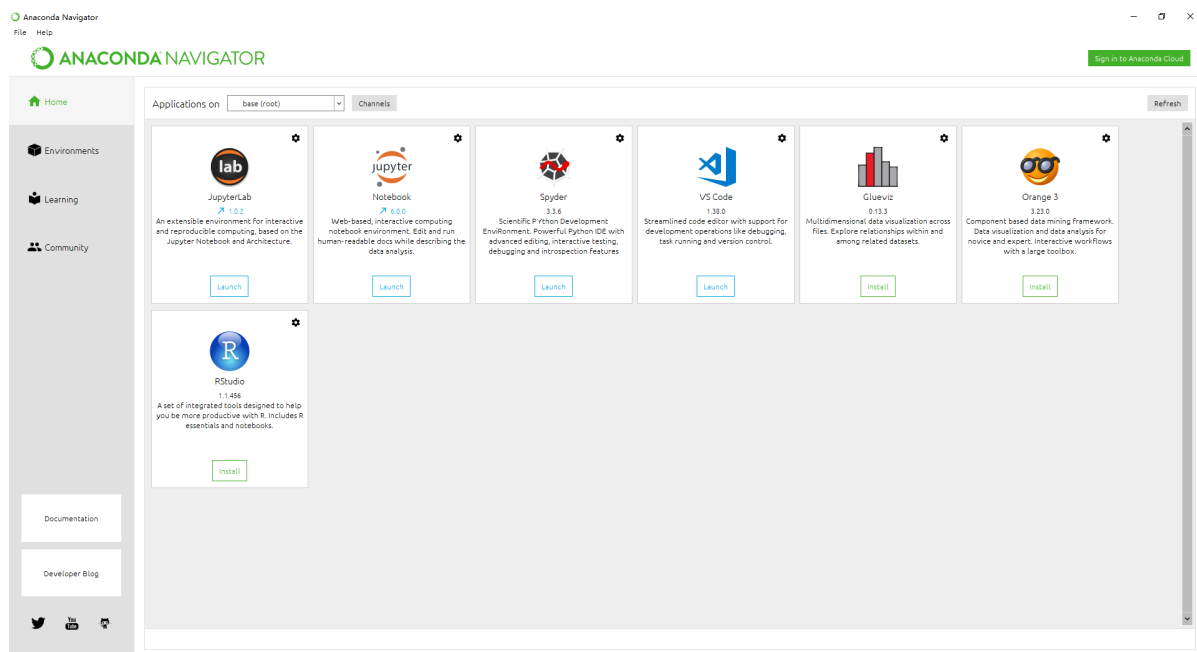
- 完成



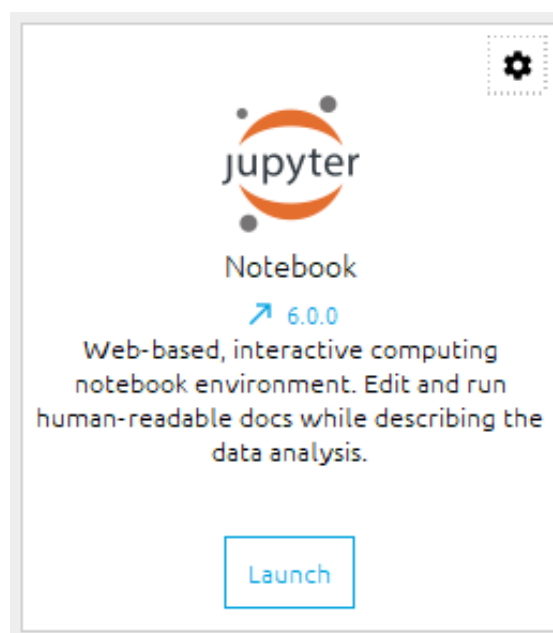
- 从开始菜单中打开Anaconda Navigator



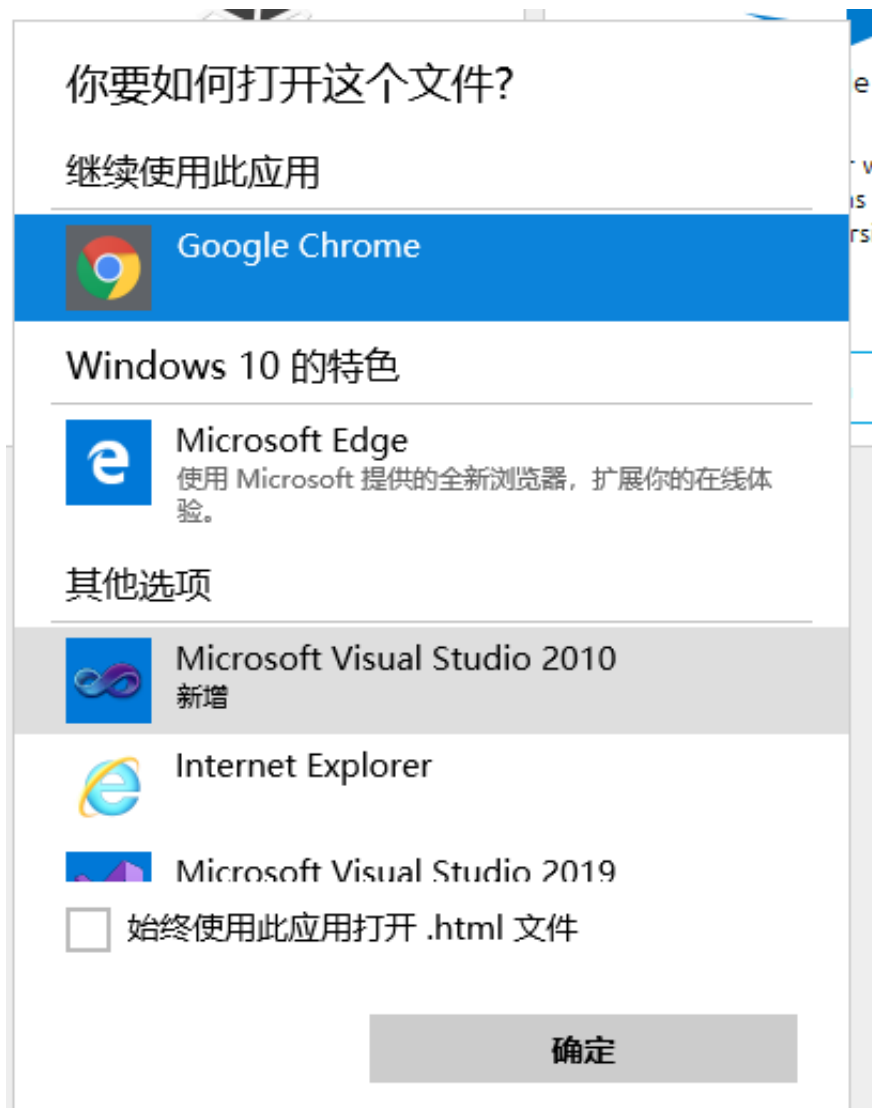
- 界面如下



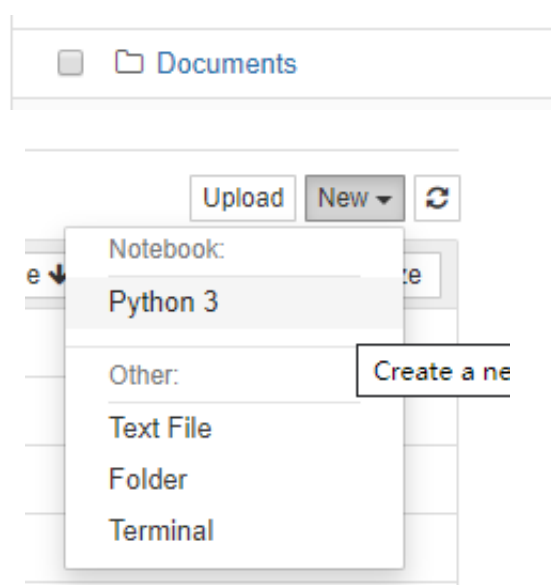
- 点击Jupyter下的Launch(运行)按钮



- 选择要经由打开的浏览器软件(没错我们是通过浏览器进行操作的)



- 接下来会显示你的文件目录，移动到一个你觉得合适的文件夹位置（比如进入Document目录），点击右上角的新建一个Python3 的记事本



- 在新的页面就可以输入代码并运行了，比如我们输入

```
In [ ]: print ("Hello World!")
```

- 点击上面菜单栏的RUN按钮，就会得到运行结果，你就完成了第一个notebook 的运行



```
In [1]: print ("Hello World!")
```

Hello World!

- 记得保存之后关闭页面，你会发现生成了一个以.ipynb结尾的未命名文件，这就是你刚才创建的notebook，里面保存着你的代码和相应的运行结果。你可以通过重命名和移动文件位置来管理不同的notebook。

 Untitled.ipynb

MacOS环境

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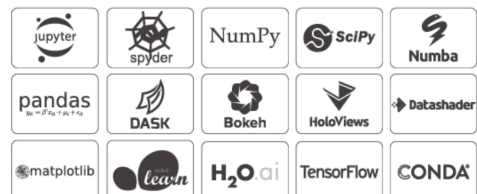
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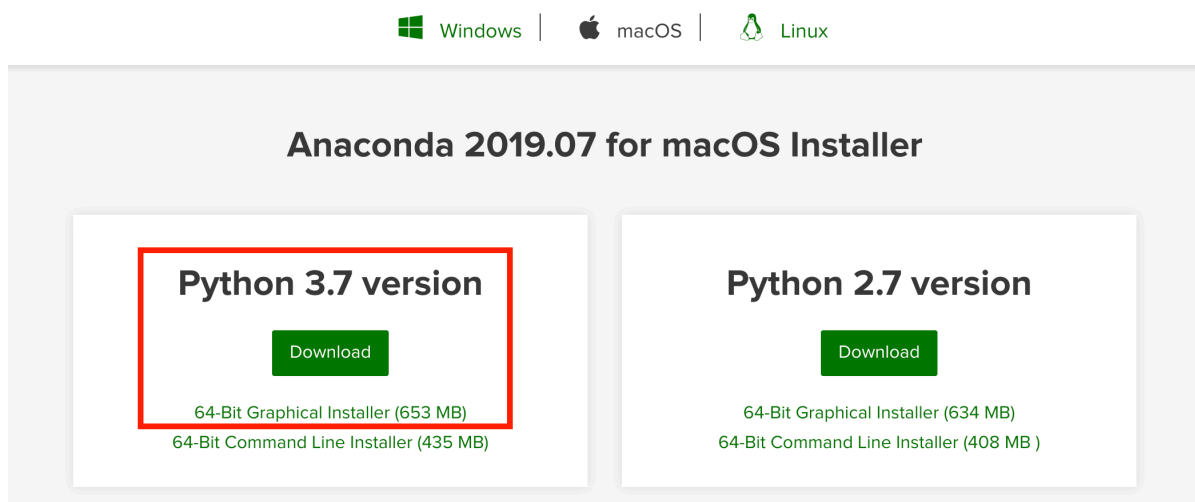
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Anaconda 2019.07 for macOS Installer

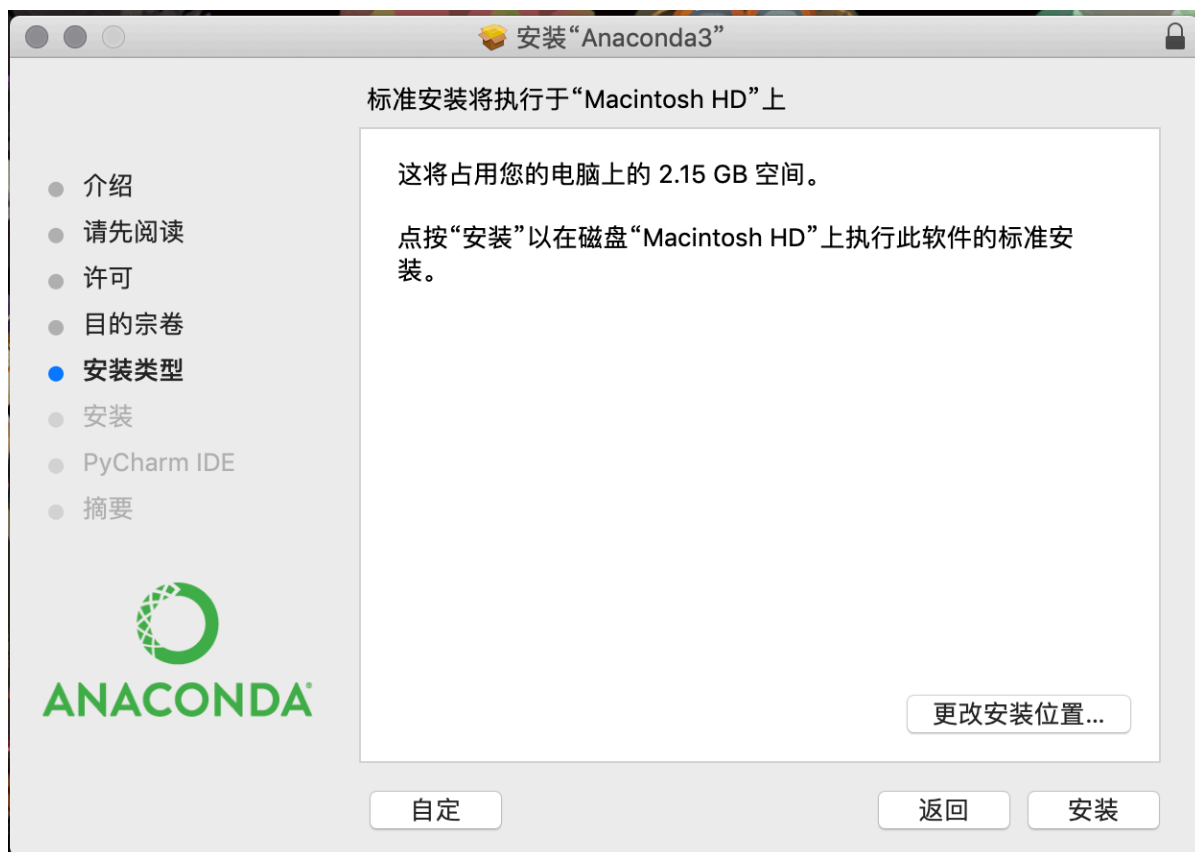
- 选择对应你系统的版本,这里我们选择Python3.7版本 64-Bit Graphical Installer.(意为带图形界面版本)



- 你会下载到.pkg格式的安装包。



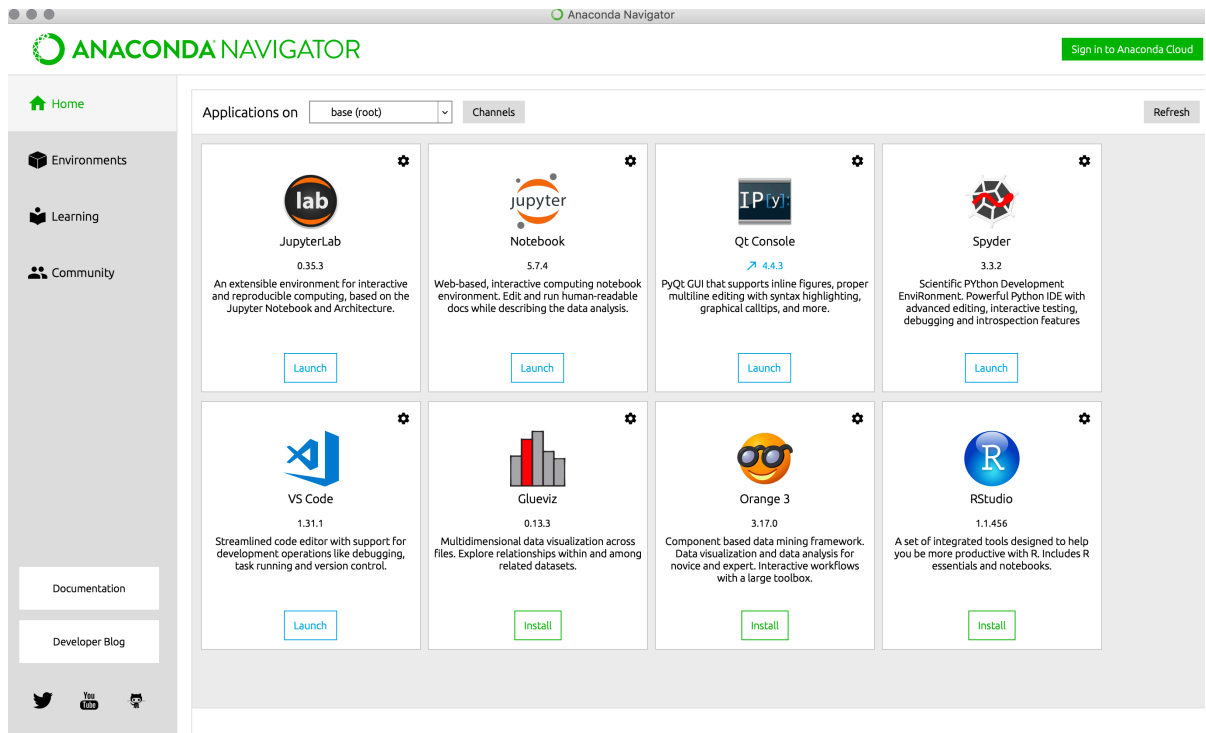
- 双击运行，按照提示一步步完成安装过程。



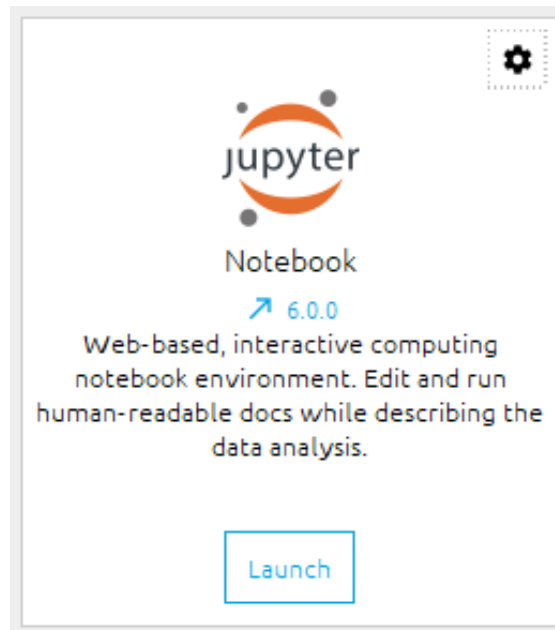
- 安装完成之后运行Anaconda-Navigator



- 程序运行



- 点击Jupyter下的Launch(运行)按钮

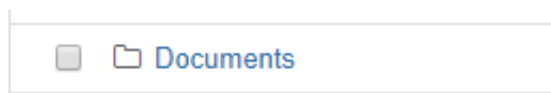


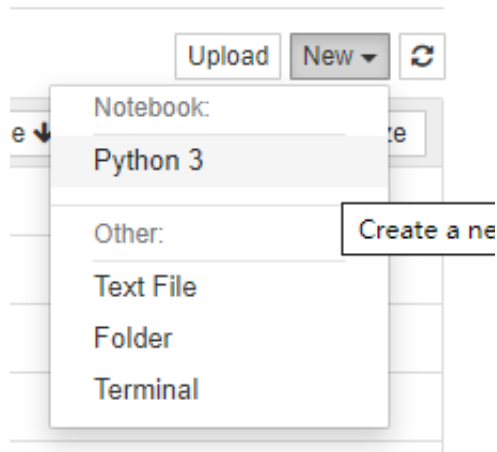
- 会出现终端辅助运行，并在默认浏览器打开

```
cube.z — jupyter_mac.command — 80x24
Last login: Thu Sep 19 11:11:14 on ttys003
/Users/cube.z/anaconda3/bin/jupyter_mac.command ; exit;
CubeMac:~ cube.z$ /Users/cube.z/anaconda3/bin/jupyter_mac.command ; exit;
[I 15:17:43.451 NotebookApp] JupyterLab extension loaded from /Users/cube.z/anaconda3/lib/python3.7/site-packages/jupyterlab
[I 15:17:43.451 NotebookApp] JupyterLab application directory is /Users/cube.z/anaconda3/share/jupyter/lab
[I 15:17:43.453 NotebookApp] 启动notebooks 在本地路径: /Users/cube.z
[I 15:17:43.453 NotebookApp] 本程序运行在: http://localhost:8888/?token=eee36201458ee909d332f7ed0697d56d6fecae6b9771c3e5
[I 15:17:43.453 NotebookApp] 使用 control-c 停止此服务器并关闭所有内核 (两次跳过确认).
[C 15:17:43.477 NotebookApp]

To access the notebook, open this file in a browser:
file:///Users/cube.z/Library/Jupyter/runtime/nbserver-14230-open.html
Or copy and paste one of these URLs:
http://localhost:8888/?token=eee36201458ee909d332f7ed0697d56d6fecae6b9771c3e5
[I 15:18:23.635 NotebookApp] Kernel started: 0174e220-5ec9-4711-b7d0-781feedb6472
[I 15:18:24.355 NotebookApp] Adapting to protocol v5.1 for kernel 0174e220-5ec9-4711-b7d0-781feedb6472
[I 15:19:30.296 NotebookApp] Starting buffering for 0174e220-5ec9-4711-b7d0-781f
```

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Hello World!
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