# Getting Started with Jupyter and Python

> **If you've already installed Anaconda, skip to Section 2.**

0   Getting your computer ready

- First, let's make sure your computer has all the required software updates, in order to minimize the potential for issues when installing Jupyter and Python.

- To get to Software Center, first click on ⊞ in the bottom left corner of your screen, and type software. That should bring up a link to the Software Center app. Click on this link.

- Once Software Center is open, go to the Updates tab and click Install All at the top right corner (see the image below) to install all required updates.
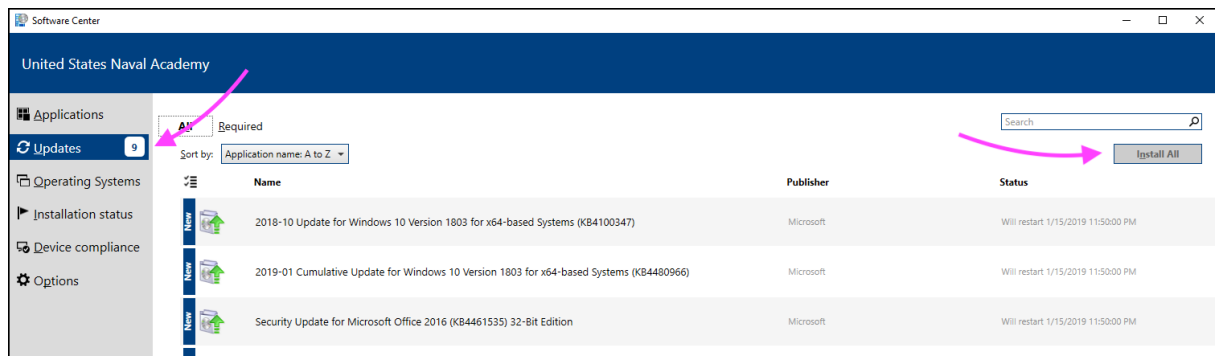
- Once the updates have finished, restart your computer.

- **Optional but strongly, strongly suggested.** Make Google Chrome your default web browser, if it is not already. Follow the instructions for Windows 10 at the link below:

    https://support.google.com/chrome/answer/95417

1   Installing Anaconda

- In this course, we will use the Anaconda Python distribution

- To install Anaconda, carefully follow the instructions below!

  ○ These instructions that follow are based on the documentation found here:

    https://docs.anaconda.com/anaconda/install/windows/

Step 1. Download the Anaconda installer. Go to the following web page:

    https://www.anaconda.com/products/individual

Scroll to the bottom to find the Anaconda Installers section. Select Windows, Python 3.8, 64-Bit Graphical Installer.

Step 2. Once the installer is downloaded, find it. Double-click on the installer to launch.

**Step 3.** You should see a Welcome to Anaconda3 dialog box. Click $\boxed{\text{Next}}$.

Step 4. Read the licensing terms and click $\boxed{\text{I Agree}}$.

Step 5. Select Just Me (recommended) and click $\boxed{\text{Next}}$.

Step 6. Leave the default destination folder as-is and click $\boxed{\text{Next}}$.

**Step 7.** You should now see the dialog box on the right.

- Leave the first box unchecked: Do not add Anaconda to your system PATH environment variable. Adding Anaconda to the PATH environment variable can interfere with other software.

- Leave the second box checked: Register Anaconda as your default Python.

- Click the $\boxed{\text{Install}}$ button.
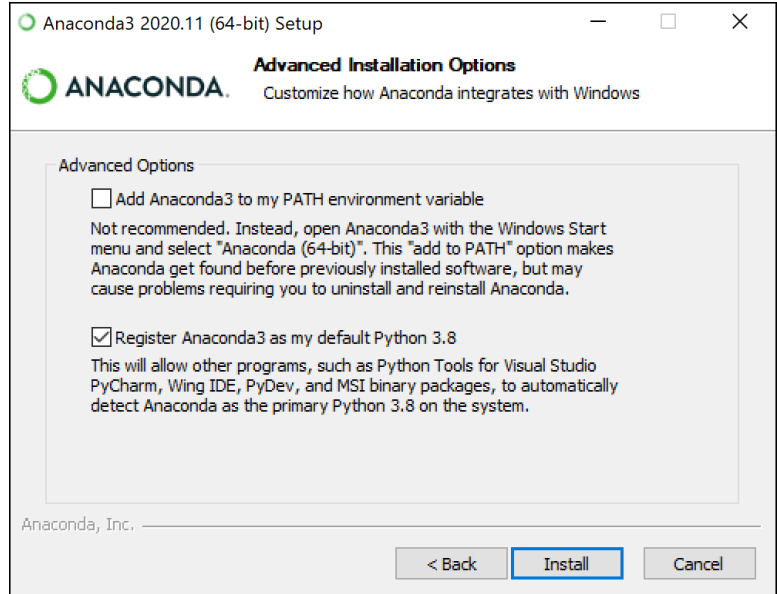
Step 8. You should see a dialog box with a progress bar. This will take a while. When the progress bar is full, click $\boxed{\text{Next}}$.

Step 9. Ignore the message about JetBrains and PyCharm and click $\boxed{\text{Next}}$.

**Step 10.** After a successful installation, you will see the dialog box shown on the right.

Uncheck the two boxes and click $\boxed{\text{Finish}}$ to complete the installation.
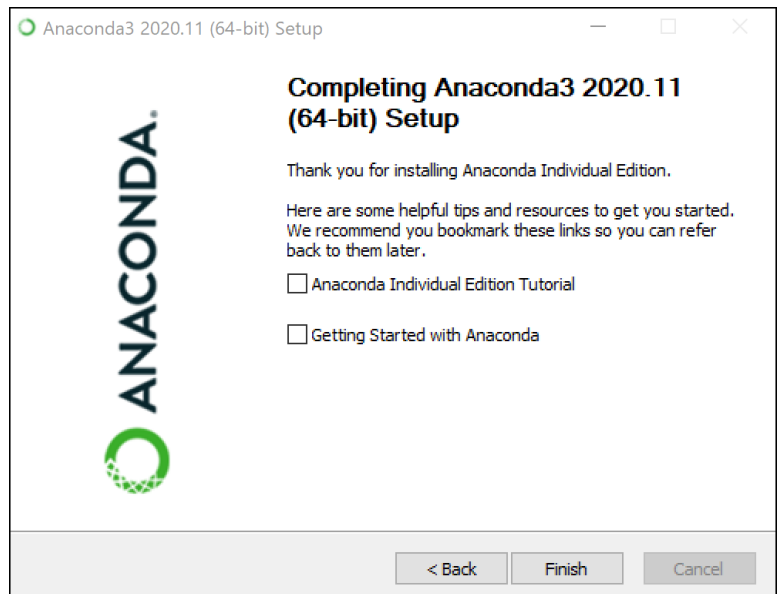
2   Launching Jupyter

- We will be writing Python code in **Jupyter**. Let's open Jupyter.

- First, click on ⊞ . Then click on `Anaconda3 (64-bit)` 》 `Jupyter Notebook (anaconda3)` .

- A command prompt window titled Jupyter Notebook (anaconda3) should appear. Just leave this open while you use Jupyter. In addition, your default web browser should open with the Jupyter file browser. It should look like this:
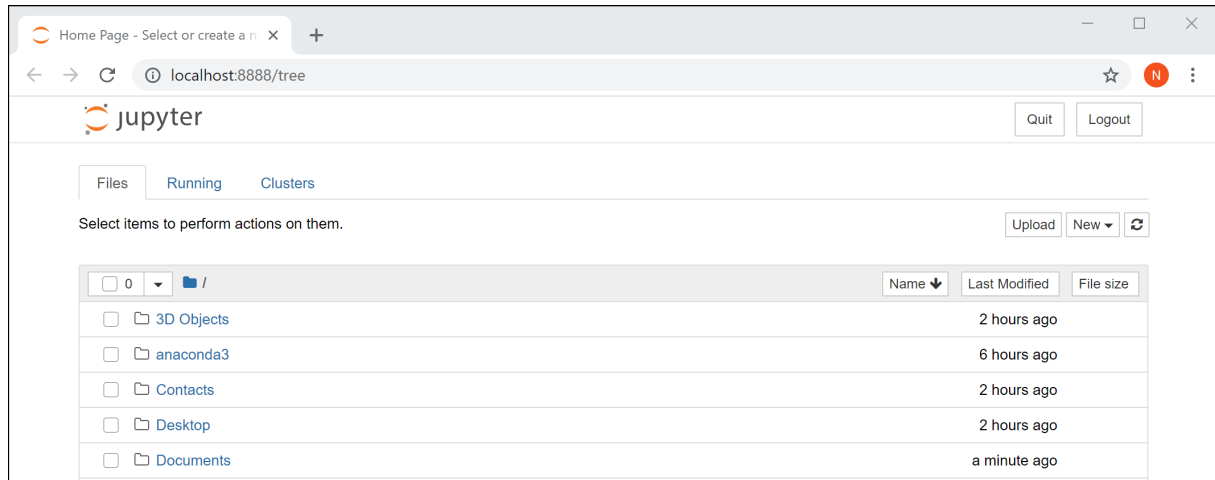
3   Downloading and opening Jupyter notebooks

- The course website is here:

  https://www.usna.edu/users/math/uhan/sa367/

- You will regularly need to download Jupyter notebooks in ZIP files from the course website and open them in Jupyter. Follow these instructions to download these files. These instructions assume you're using Google Chrome as your web browser.

Step 1. Start by clicking the link for the Jupyter notebook you want to use. On the course website, these are labeled with (zip) (for a ZIP file). You'll see the file download appear at the bottom of the window.
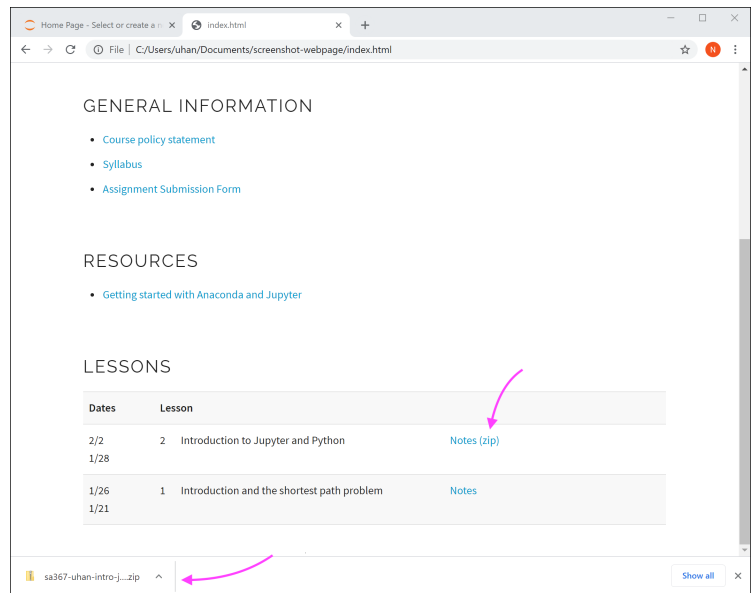

**Step 2.** Click on the arrow next to the file download, and select Show in Folder .
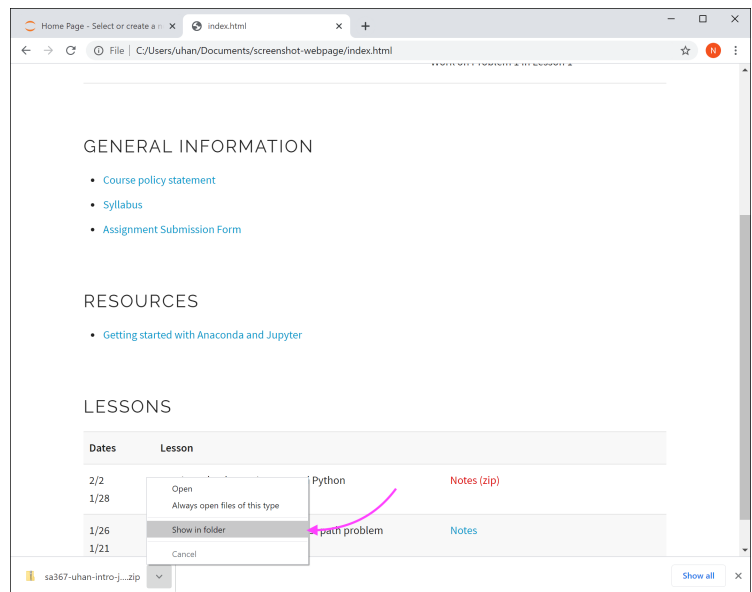
Step 3. An Explorer window should appear, highlighting the file you just downloaded. Do not double-click it. Instead, right-click the file, and select Extract All...
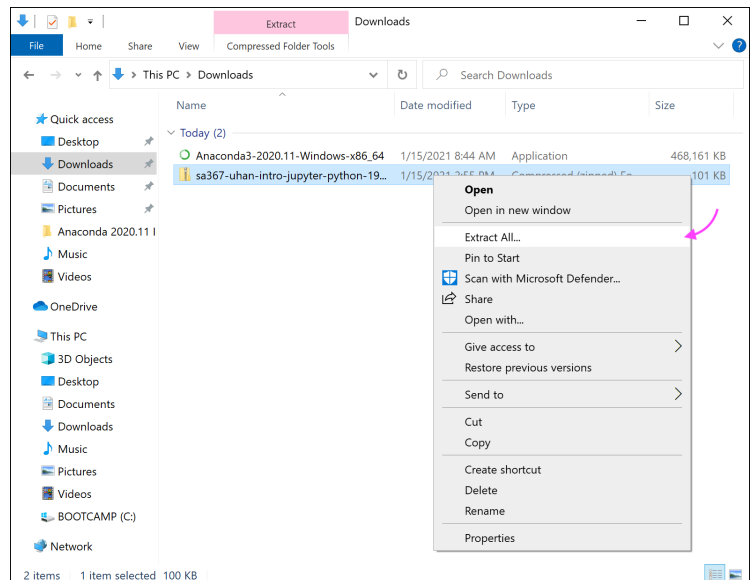
Step 4. A dialog box should appear, asking where you want to extract the contents of this file. Click on Browse and select where you want to put a new folder with the contents of the file. Then, click Extract .
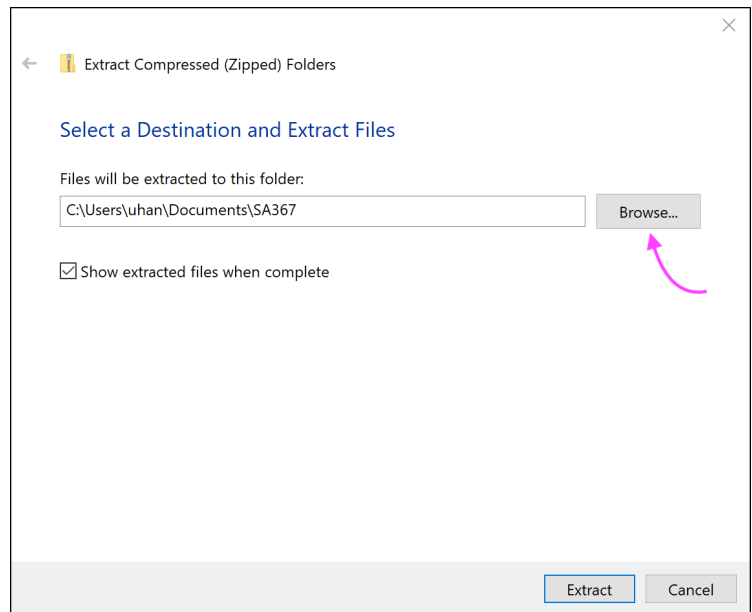
Step 5. Once the extraction is done, an Explorer window should appear, showing you the newly created folder with the contents of the file. Rename the folder something easy to read.
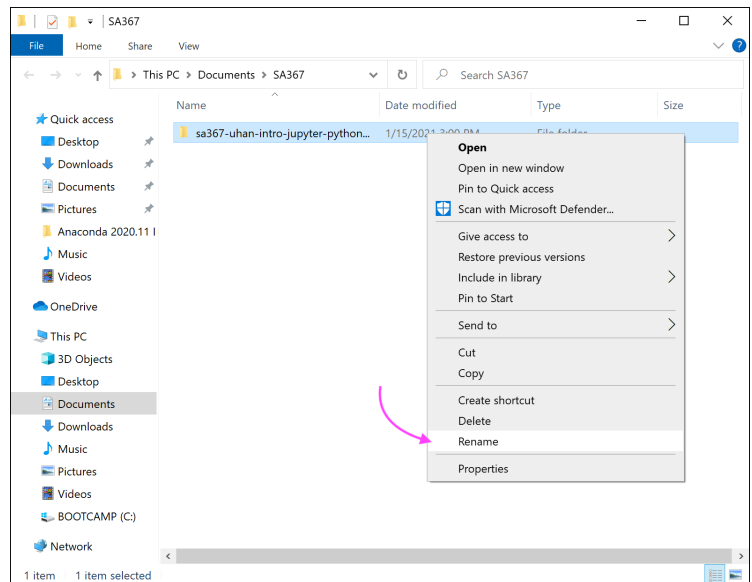
Step 6. Now when you launch Jupyter, navigate the file browser to the location of this newly created folder.