

Getting Started with Anaconda and JupyterLab

Last updated: August 15, 2024

1 Installing Anaconda

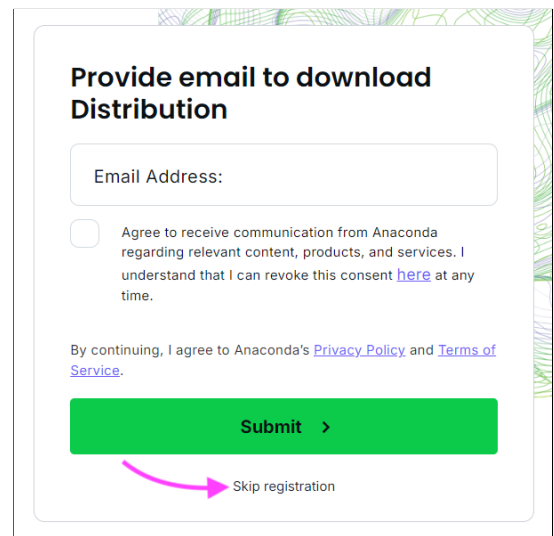
- In this course, we will use the Anaconda Python distribution.
- To install Anaconda, carefully follow the instructions below!
 - These instructions are based on the documentation found here:

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

Step 1. Download the Anaconda installer. Go to the following URL:

<https://www.anaconda.com/download>

If you want, enter your email address and click **Submit**. Otherwise, simply click Skip registration.



The screenshot shows a registration form titled "Provide email to download Distribution". It includes an "Email Address:" input field, a checkbox for "Agree to receive communication from Anaconda regarding relevant content, products, and services. I understand that I can revoke this consent [here](#) at any time.", and a green "Submit >" button. A pink arrow points from the bottom of the form to the text "Skip registration".

Step 2. On the next screen, click the **Download** button to download the installer to your computer.

Step 3. Once the installer is downloaded, find it. Double-click on the installer to launch.

Step 4. You should see a Welcome to Anaconda3 dialog box. Click **Next**.

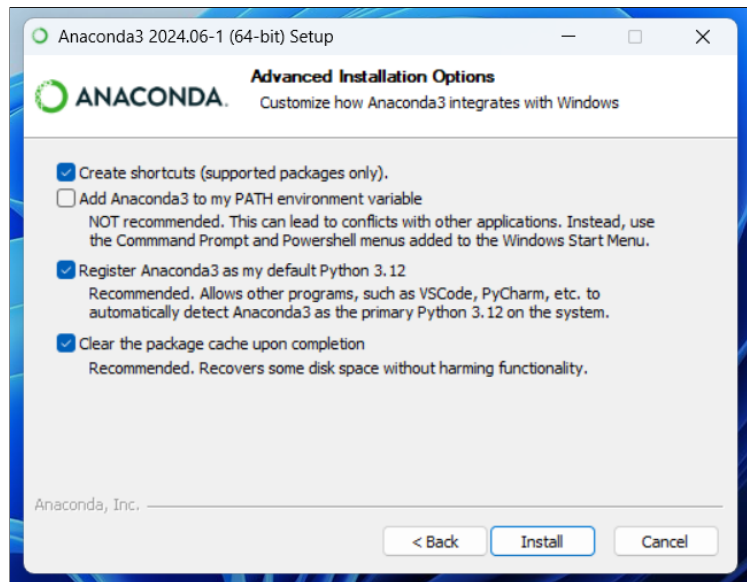
Step 5. Read the licensing terms and click **I Agree**.

Step 6. Select Just Me (recommended) and click **Next**.

Step 7. Leave the default destination folder as-is and click **Next**.

Step 8. You should now see the dialog box on the right.

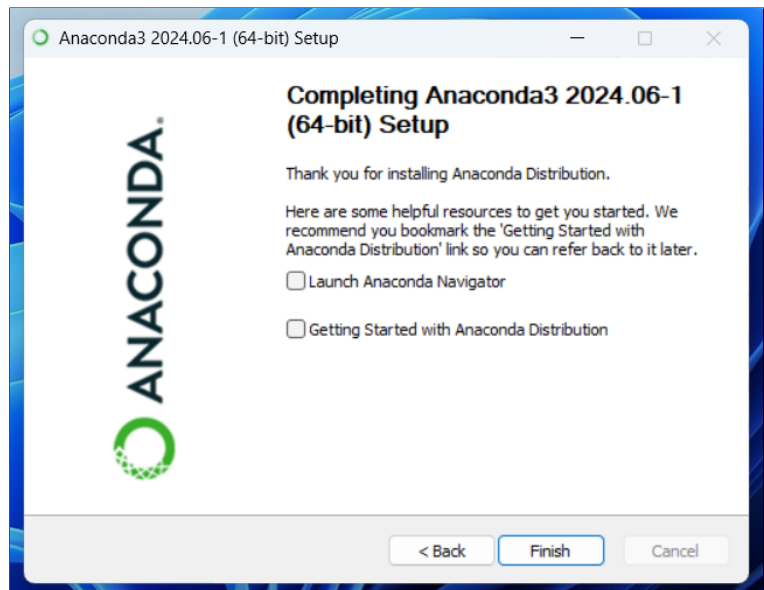
- Leave the first box checked.
- Leave the second box unchecked: Do not add Anaconda to your system PATH environment variable. Adding Anaconda to the PATH environment variable can interfere with other software.
- Leave the third box checked: Register Anaconda as your default Python.
- Check the fourth box: Clear the package cache upon completion.
- Click the `Install` button.



Step 9. You should see a dialog box with a progress bar. This will take a while. When the progress bar is full, click `Next`.



Step 10. Ignore the advertisement for Anaconda in the Cloud and click `Next`.

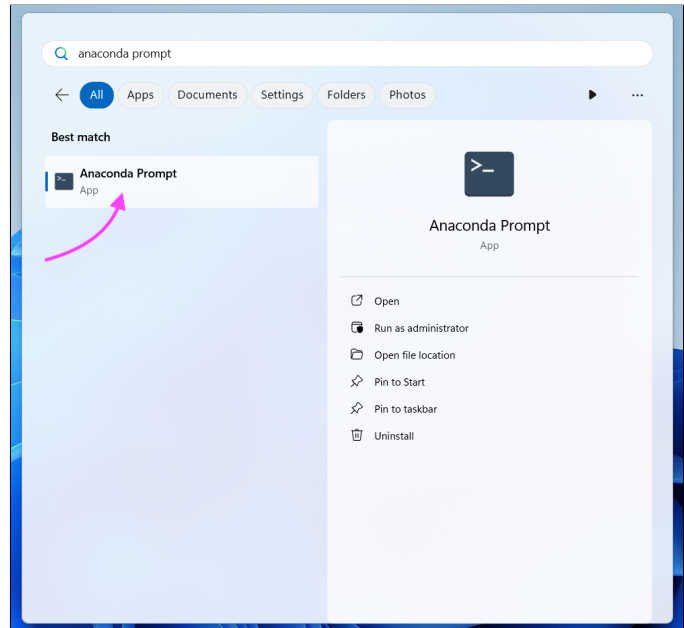
Step 11. After a successful installation, you will see the dialog box shown on the right. Uncheck the two boxes and click `Finish` to complete the installation.




2 Install packages you'll need for this class

- Now that Anaconda is installed, let's install some additional packages that you will need for this class.



Step 1. Click on  at the bottom of your screen. Search for anaconda prompt. Then click  in the search results. A terminal window will appear.



Step 2. At the prompt, type the following and press :

```
conda install conda-forge::altair-all
```

You will see the conda package installer solve the environment. This might take a while.

Step 3. The conda package installer will then ask you if you want to proceed. Type  and press . The conda package installer will then download the packages and complete the installation.

Step 4. Close the terminal window.


3 Launching JupyterLab

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

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

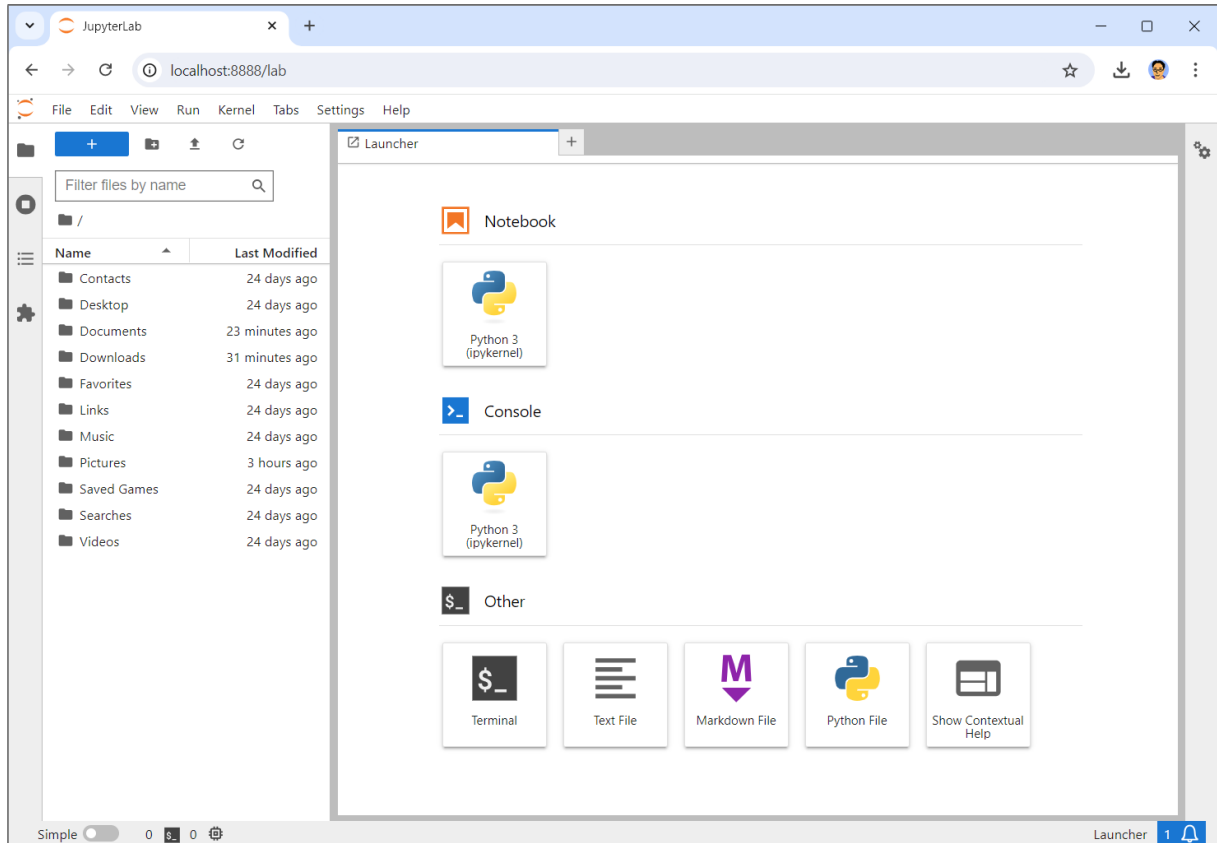
- In this class, we will be writing Python code in **JupyterLab**. Let's open JupyterLab.

Step 1. Click on  at the bottom of your screen. Search for anaconda prompt. Then click  in the search results. A terminal window will appear.

Step 2. At the prompt, type the following and press :

```
jupyter lab
```

Step 3. Your default web browser should open with the JupyterLab interface. It should look like this:



Keep the terminal window open until you're done with Jupyter Lab.

4 Downloading and opening Jupyter notebooks in zip files

- The course website is here:

<https://courses.uhan.me/sa433>

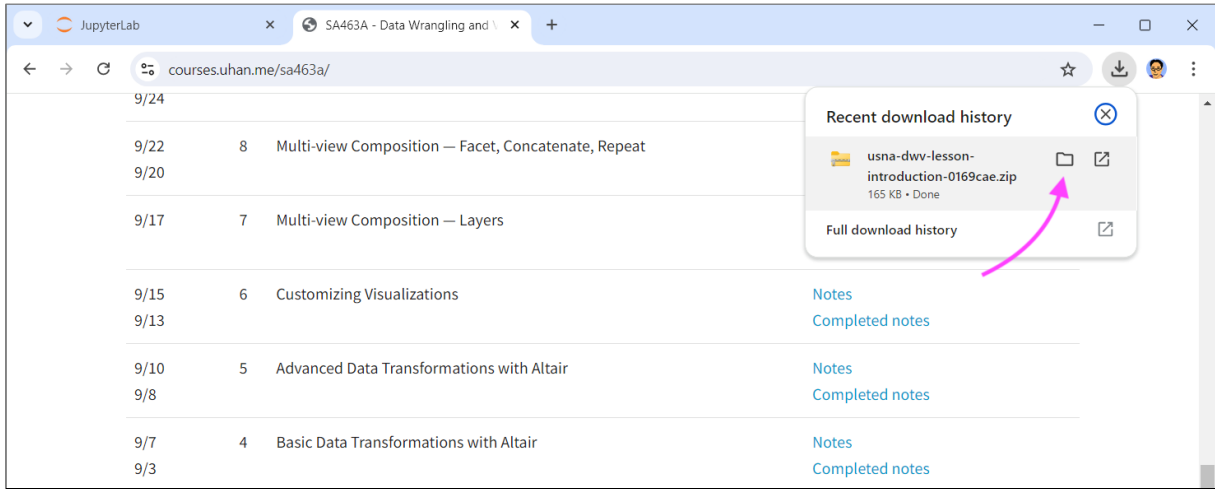
- You will regularly need to download Jupyter notebooks in zip files from the course website and open them in JupyterLab. Follow these instructions to download a lesson from the course website. These instructions assume you're using Google Chrome as your web browser.

Step 1. Start by clicking the link for the Jupyter notebook you want to use.

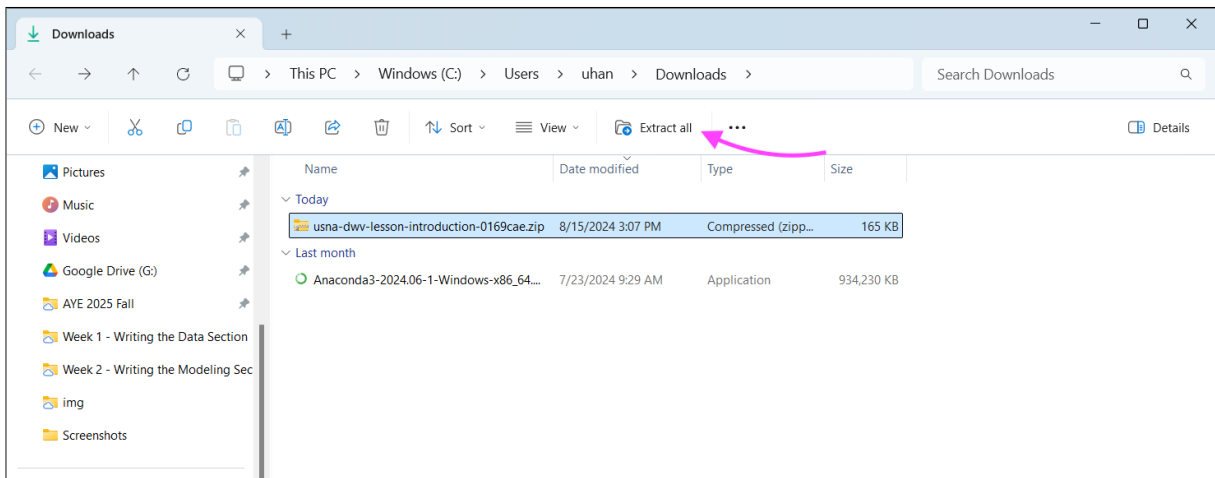
9/7	4	Basic Data Transformations with Altair	Notes Completed notes
9/3			
9/1	3	Introduction to Data Visualization with Altair	Notes Completed notes
8/30			
8/27	2	Warm Up	Notes Completed notes
8/25	1	A Survival Course in Jupyter and Python	Notes Completed notes
8/23	0	Course Overview	Notes

Step 2. A dialog box will appear. Choose a destination for this file, and click **Save**.

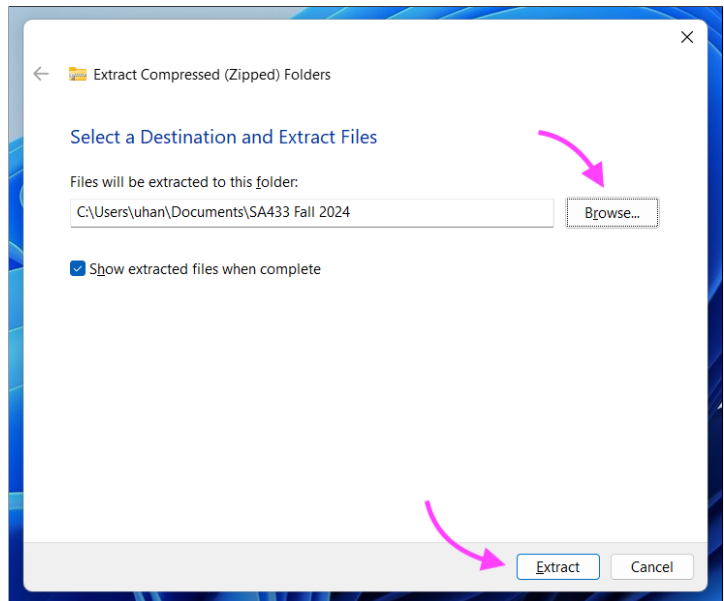
Step 3. Click the Downloads icon in the toolbar. Then click the folder icon next to the file you just downloaded.



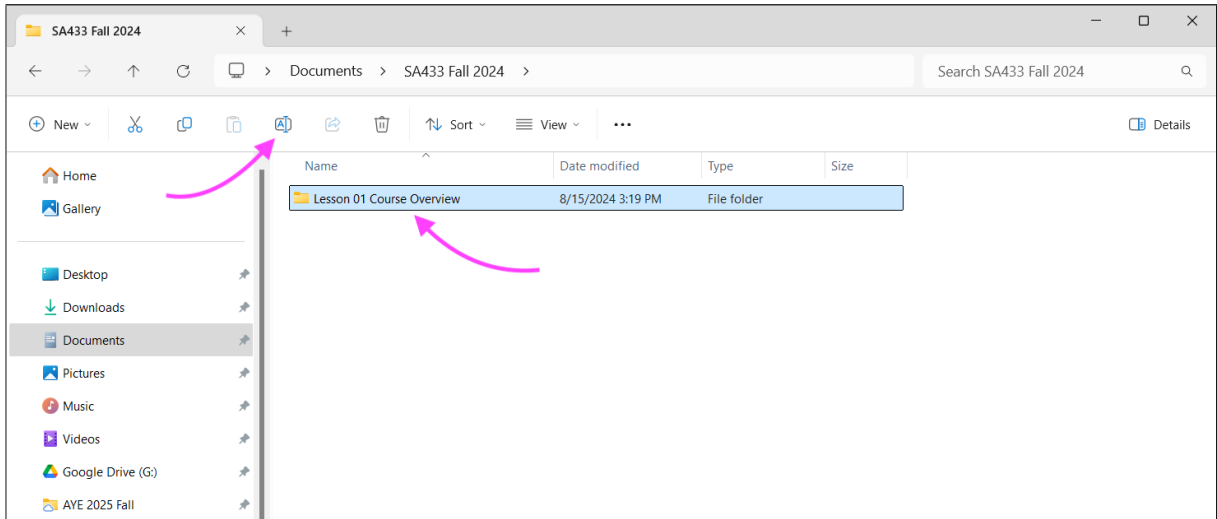
Step 4. A File Explorer window should appear, highlighting the file you just downloaded. Do not double-click it. Instead, select **Extract all** from the toolbar. (You can also right-click the file, and select **Extract All...**)



Step 5. 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 6. Once the extraction is done, a File Explorer window should appear, showing you the newly created folder with the contents of the file. Rename the folder something easy to read.



Step 7. In JupyterLab, navigate the file browser to the location of this newly created folder.