

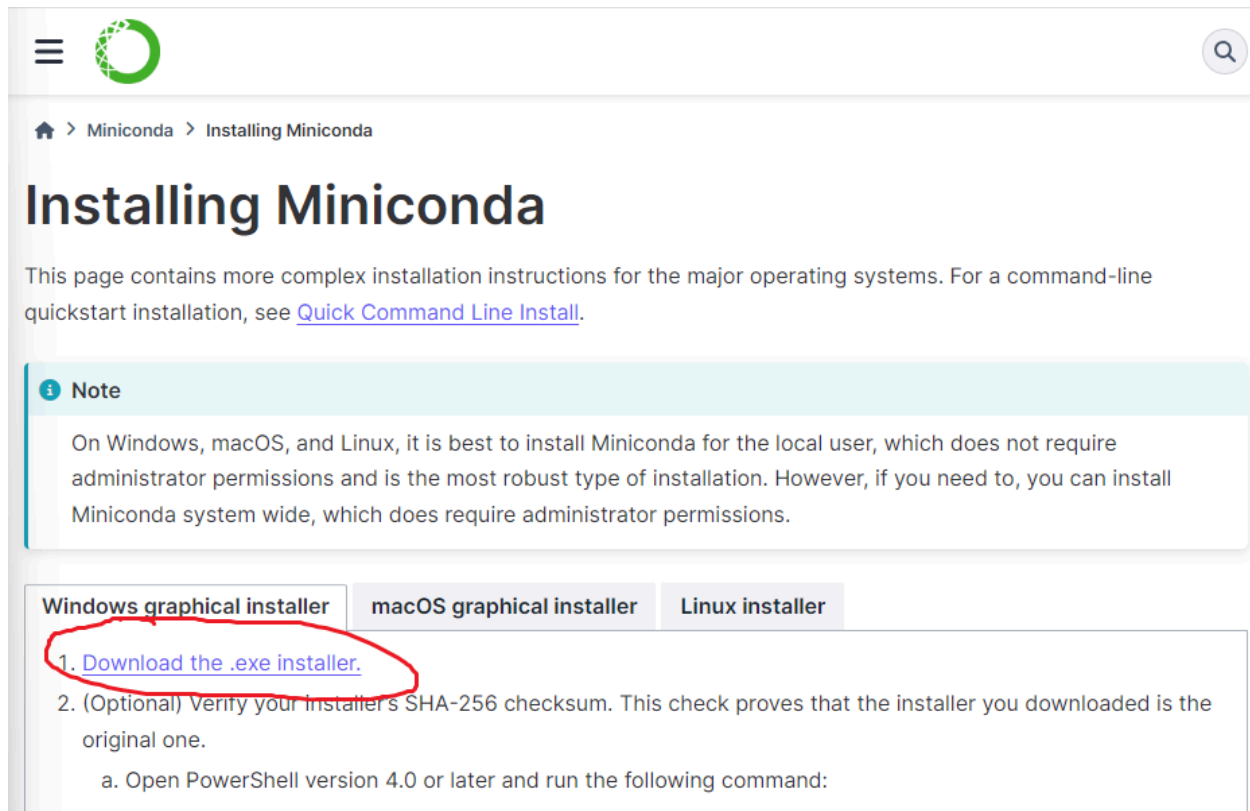
QuickStart Guide

CVE Visualizer

Installation

1) Install Miniconda

- a) Visit <https://docs.anaconda.com/miniconda/miniconda-install/>
- b) Download and run installer



The screenshot shows the 'Installing Miniconda' page from the Anaconda documentation. The page has a header with the Anaconda logo and a search icon. Below the header, there's a breadcrumb trail: 'Miniconda > Installing Miniconda'. The main heading is 'Installing Miniconda'. A paragraph follows, stating that the page contains more complex installation instructions for major operating systems and that for a command-line quickstart, users should see the 'Quick Command Line Install' link. A 'Note' box contains advice on installing for the local user versus system-wide. Below this, there are three tabs: 'Windows graphical installer', 'macOS graphical installer', and 'Linux installer'. The 'Windows graphical installer' tab is selected, and its content is shown below. The first step, '1. Download the .exe installer.', is circled in red. The second step is optional verification of the SHA-256 checksum.

Miniconda > Installing Miniconda

Installing Miniconda

This page contains more complex installation instructions for the major operating systems. For a command-line quickstart installation, see [Quick Command Line Install](#).

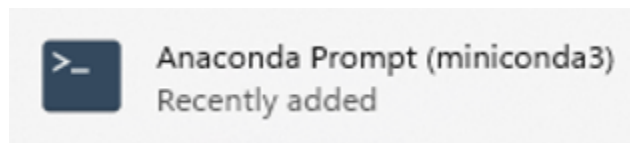
Note

On Windows, macOS, and Linux, it is best to install Miniconda for the local user, which does not require administrator permissions and is the most robust type of installation. However, if you need to, you can install Miniconda system wide, which does require administrator permissions.

Windows graphical installer macOS graphical installer Linux installer

1. [Download the .exe installer.](#)
2. (Optional) Verify your installer's SHA-256 checksum. This check proves that the installer you downloaded is the original one.
 - a. Open PowerShell version 4.0 or later and run the following command:

c) Once Miniconda is installed, open Anaconda Prompt



2) Install Miniconda packages

- a) Enter “cd desktop” in the Anaconda Prompt window
- b) Enter “mkdir cpatt”
- c) Enter “cd cpatt”
- d) Copy and paste:

```
conda create --prefix ./env graphviz jupyter notebook matplotlib numpy pandas pydot  
python scikit-learn seaborn
```

- e) Press Enter
 - f) Enter “y” to proceed
 - g) Allow packages to install
 - h) Once the package installation is done, Miniconda will list your specific directory path. Copy and paste this and press Enter
- NOTE: You won't need to copy the “\$”

```
Downloading and Extracting Packages:  
Preparing transaction: done  
Verifying transaction: done  
Executing transaction: done  
#  
# To activate this environment, use  
#  
# $ conda activate C:\Users\testTwo\Desktop\cpatt\env  
#
```

Running the CVE Visualizer

- 3) With the cpatt folder on your Desktop, copy and paste the following files into the cpatt folder:

NOTE: You will see a folder in the cpatt folder called “env” - you don't need to open this.

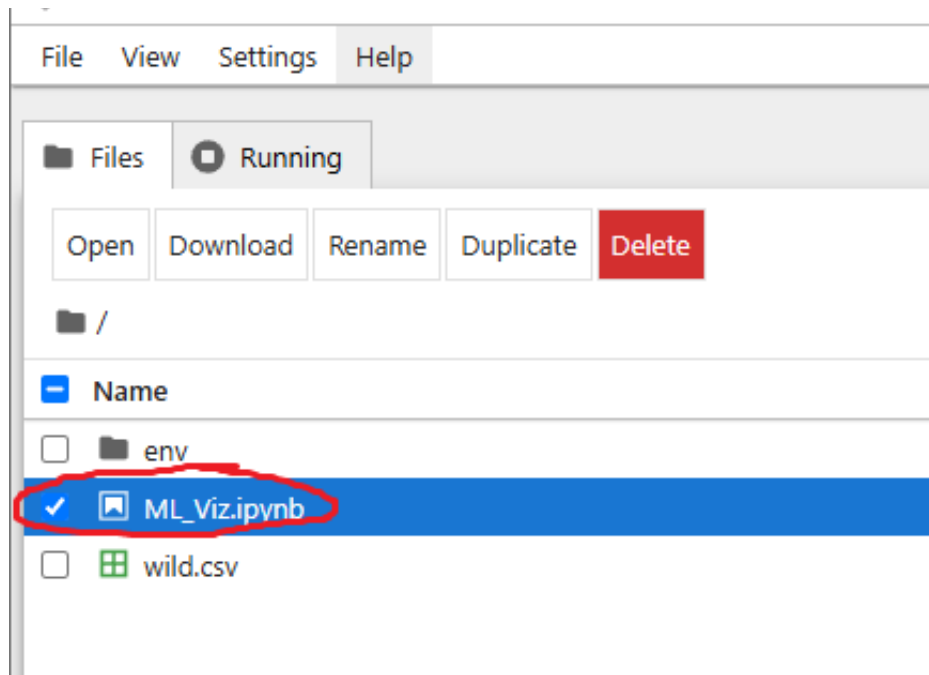
- a) ML_Viz.ipynb
- b) wild.csv

4) In the Anaconda Prompt window, copy and paste:

jupyter notebook

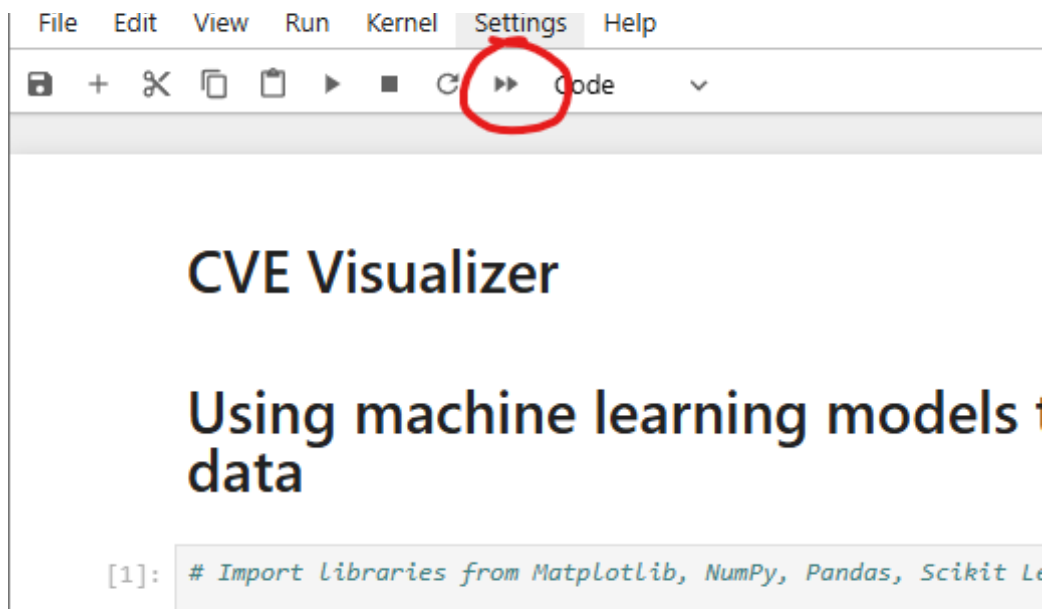
a) Press Enter

b) Once the Jupyter home page opens in your web browser, double click on ML_Viz.ipynb to open the CVE Visualizer

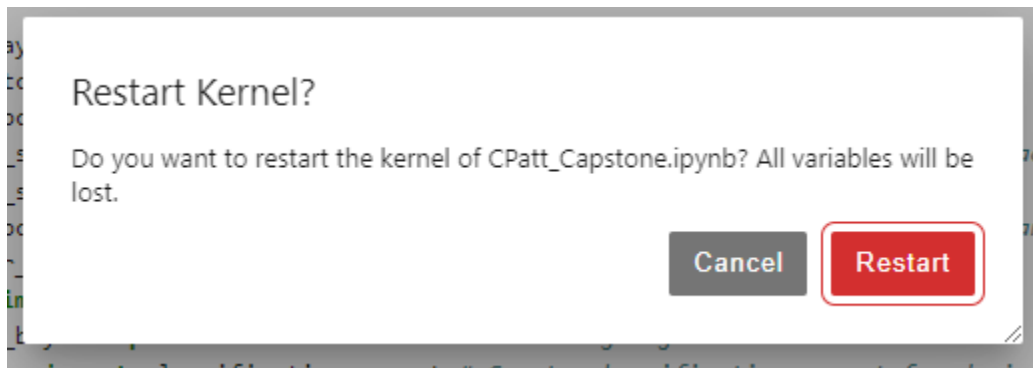


5) Once ML_Viz.ipynb opens

a) Click the double arrow icon



- b) Click the Restart button and wait a moment. The application will run the code and ask for user input.



Inputting

- 1) Once the CVE Visualizer starts running, you'll be asked to input the data file name two times:
 - a) Enter "wild.csv" and wait a moment

```
from sklearn.metrics import classification_report # Create classification report for decision tree
from sklearn.tree import export_graphviz # Export dot generated for decision tree
```

Input & view data file

```
# Allow user to input dataset file
```

```
wild_data = pd.read_csv(input("Enter file name (include .csv file extension): "))
```

```
Enter file name (include .csv file extension): 
```

```
# View first rows of raw data
```

b) Enter “wild.csv” again

Apply machine learning model (make predictive decisions) and show decision making process (Gaussian algorithm is used)

```
[*]: # Allow user to input dataset file
```

```
wild_tree = pd.read_csv(input("Enter file name (include .csv file extension): "))
```

```
Enter file name (include .csv file extension): 
```

```
[*]: # View first rows of raw data
```

```
wild_tree.head(10)
```

2) Scroll to the top of the Jupyter page to see how the data was used