



UGANDA CHRISTIAN UNIVERSITY

A Center of Excellence in the Heart of Africa

DEPARTMENT OF COMPUTING & TECHNOLOGY

Faculty of Engineering, Design & Technology

STEP-BY-STEP GUIDE TO INSTALLING PYTHON AND VARIOUS LIBRARIES.

Step 1: Install Visual Studio Code

1. Download VS Code: Visit the [Visual Studio Code download page](#) and download the version suitable for your operating system (Windows, macOS, or Linux).
2. Install VS Code: Run the installer and follow the prompts to complete the installation.

Step 2: Install Python

1. Download Python: Go to the [Python official website](#) and download the latest version of Python.
2. Install Python: Run the installer. Ensure you check the box that says "Add Python to PATH" before clicking "Install Now." Pip is included with Python installations starting from version 3.4.

Step 3: Install Anaconda (Optional but Recommended)

Anaconda simplifies package management and deployment.

1. Download Anaconda: Visit the [Anaconda distribution page](#) and download the installer for your OS.
2. Install Anaconda: Follow the installation instructions provided on the website.

Step 4: Set Up Your Python Environment

1. Open Anaconda Prompt (if you installed Anaconda) or your command line interface.
2. Create a new environment:
3. bash

```
conda create -n myenv python=3.10 pandas jupyter seaborn scikit-learn
```

- 4.
5. Here, `myenv` is the name of your environment, which you can change as desired.
6. Activate your environment:
7. bash

```
conda activate myenv
```

Step 5: Open Command Line Interface

- Windows: Open Command Prompt (cmd).
- macOS/Linux: Open Terminal.

Step 6: Upgrade Pip (Optional)

It's a good practice to ensure that the pip is up-to-date. Run the following command:

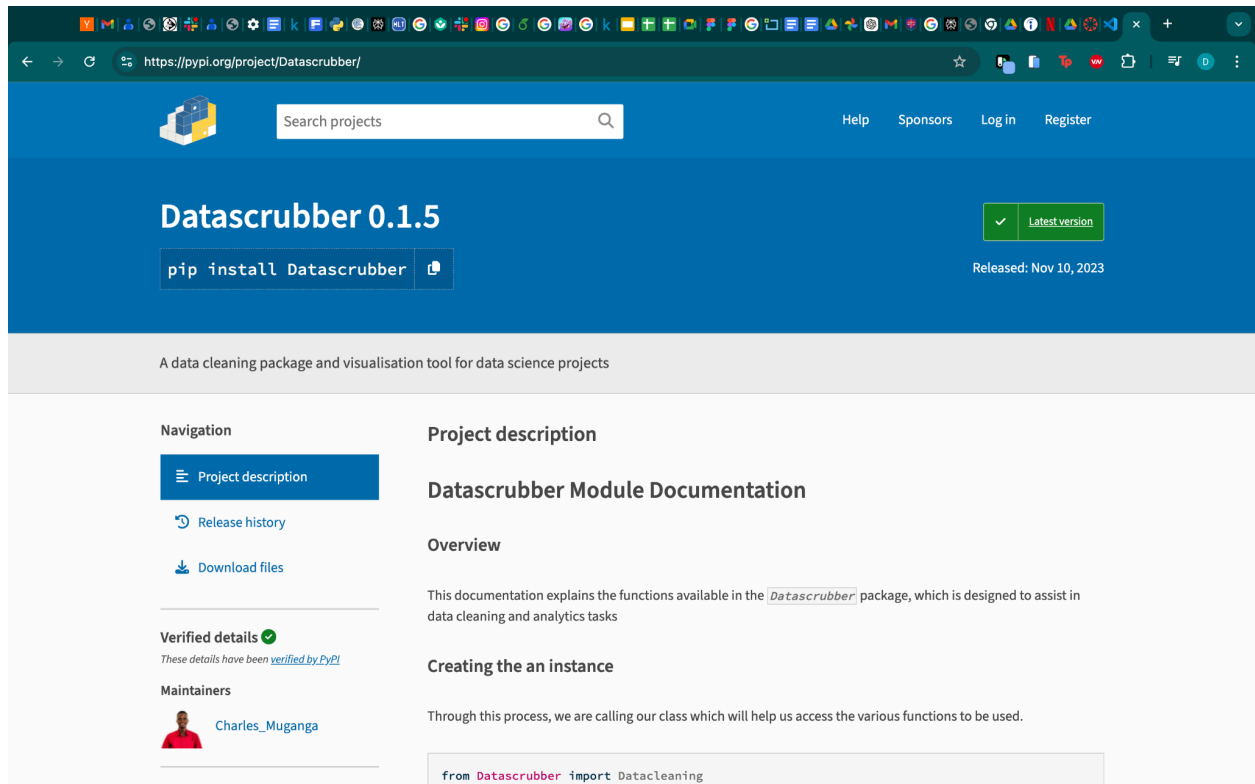
```
bash
```

```
python -m pip install --upgrade pip
```

Step 7: Install Datascrubber

Go to <https://pypi.org/>

Search for Datascrubber



Open your Visual Studio code, A new terminal, and paste **pip install Datacrubber**, this will help to install all the libraries that are needed to manipulate data.

Step 8: Install VS Code Extensions

1. Open VS Code.
2. Go to Extensions: Click on the Extensions icon in the Activity Bar on the side of the window or press **Ctrl+Shift+X**.
3. Search for Extensions:
 - Install the Python extension by Microsoft.
 - Install the Jupyter extension by Microsoft.

Step 9: Create a Jupyter Notebook

1. Open Command Palette: Press **Ctrl+Shift+P**.
2. Create a New Jupyter Notebook:
 - Type **Create: New Jupyter Notebook** and hit Enter.
 - Alternatively, create a new file with a **.ipynb** extension by right-clicking in your Explorer panel.

Step 10: Select Your Python Interpreter

1. Select Interpreter:

- Open Command Palette again (**Ctrl+Shift+P**).
- Type **Python: Select Interpreter** and choose your newly created environment (**myenv**).

Step 11: Verify Installation

To verify that the libraries are installed correctly, you can open a Python shell or a Jupyter Notebook and try importing them:

```
Python
```

```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns

print("Libraries imported successfully!")
```

If there are no errors upon running this code, your installations were successful.

Step 12: Using Anaconda (Optional)

If you prefer using Anaconda for package management:

Install Anaconda: Download and install from the [Anaconda website](#).

Create a New Environment:

```
bash
```

```
conda create -n myenv python=3.10 pandas numpy matplotlib
seaborn
```

Activate the Environment:

```
bash
```

```
conda activate myenv
```

This environment will have all the specified libraries installed.