





Do you want to learn data analytics without spending a fortune on courses and tools?

If yes, then Python is the answer.

Python is a powerful and easy-to-use programming language that can help you perform data analysis tasks in minutes.

In this post, you will learn how to use Python for data analysis.







#### What You Will Learn?

- Set up a Python environment using Anaconda package
- Learn the basic concepts of Python such as variables, data types, operators, loops, and functions
- Understand the working of Python libraries such as Pandas, Numpy, Scipy, and Matplotlib for data manipulation, analysis, and visualization
- Practice working with datasets and building machine learning models using scikit-learn library





## How to Set Up a Python Environment

The first step to use Python for data analysis is to set up a Python environment on your computer. A Python environment is a collection of software tools that allow you to run Python code and install additional libraries.

One of the easiest ways to set up a Python environment is to use Anaconda. Anaconda is a free and open-source distribution of Python that comes with many popular libraries for data analysis.



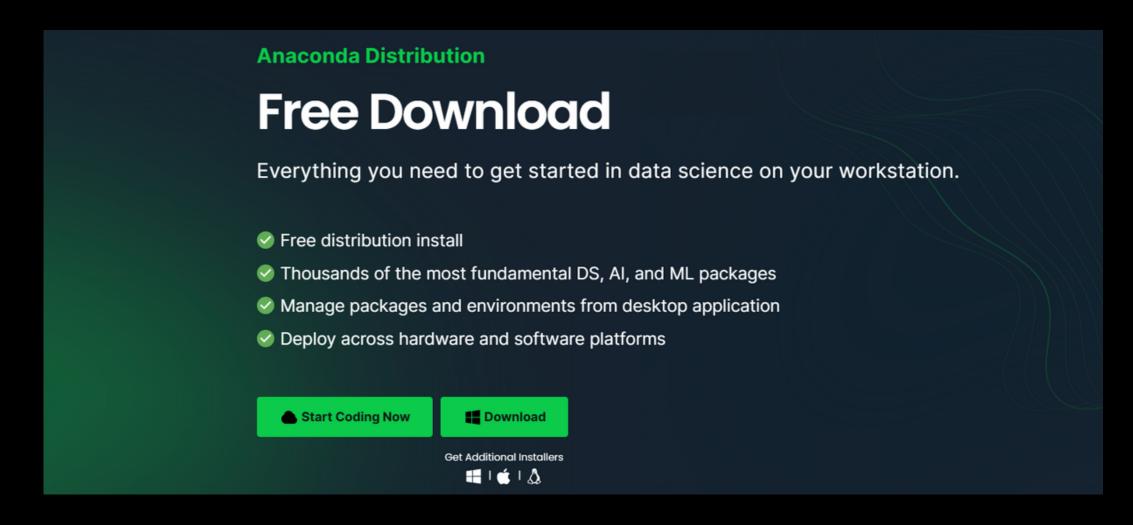


#### Install Anaconda

To install Anaconda, go to below link and download the installer for your operating.

Once installed then launch Jupyter Notebook from Anaconda Navigator. Jupyter Notebook is an interactive web-based application that allows you to write and run Python code in your browser.

https://www.anaconda.com/download







#### Learn Basics of Python

Before you can use Python for data analysis, you need to learn some basic concepts of Python programming. I recommend this course "Python for Data Science and Machine Learning Bootcamp" from Udemy by Jose Portilla.

https://www.udemy.com/course/python-for-datascience-and-machine-learning-bootcamp/

# Python for Data Science and Machine Learning Bootcamp

Learn how to use NumPy, Pandas, Seaborn, Matplotlib, Plotly, Scikit-Learn, Machine Learning, Tensorflow, and more!

4.6 ★ ★ ★ ★ ★ (131,049 ratings) 641,737 students

Created by Jose Portilla

🕛 Last updated 05/2020 🖨 English 🖪 English, Arabic [Auto], <u>14 more</u>







#### Working with Python Libraries

Python has a rich set of libraries that can help you perform various data analysis tasks. Some of the most popular and useful libraries are - Pandas, Numpy, Scipy and Matplotlib.

I recommend this course "Data Analysis with Python" from Coursera by IBM.

https://www.coursera.org/learn/data-analysis-withpython

### **Data Analysis with Python**

\* \* \* \* \* 16,609 ratings | 6 93%







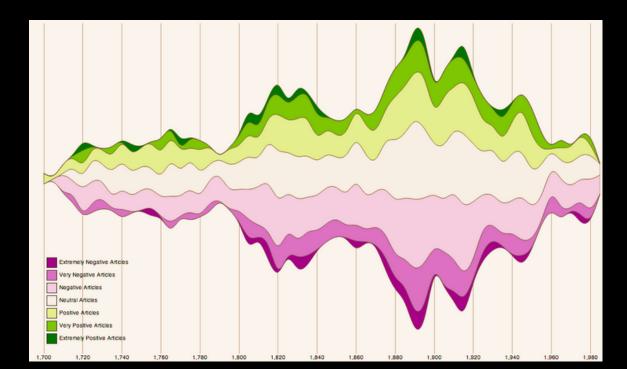


#### Working with Datasets

To practice working with datasets in Python, you can use some of the following sources:

- Kaggle: Kaggle is a platform for data science and machine learning competitions and provides datasets on various topics.
- UCI Machine Learning Repository: UCI Machine Learning Repository is a collection of datasets for machine learning research.
- Scikit-learn: Scikit-learn is a library for machine learning in Python. It provides built-in datasets for classification, regression, and clustering tasks.







#### Visualize Data with Python

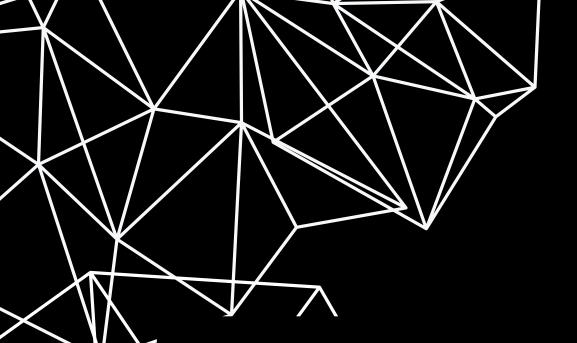
Data visualization is the process of creating graphical representations of data to communicate information and insights.

Python has many libraries for data visualization, such as Matplotlib, Seaborn, Plotly, Bokeh, and more.

I recommend this course "Plot With pandas: Python Data Visualization for Beginners" from Real Python by Reka Horvath.

https://realpython.com/pandas-plot-python/







# Want to gain real-world experience in data analytics/BI?

I'm here to help you with hands-on training and mentorship through real-life projects.

Book a 1:1 call with me today and let's get started!



