**Pandas**

Pandas is a Python library used for working with data sets. It has functions for analyzing, cleaning, exploring, and manipulating data. Pandas allows us to analyze big data and make conclusions based on statistical theories. It can clean messy data sets, and make them readable and relevant. Relevant data is very important in data science.

**NumPy**

**NumPy**stands for **Numerical Python,** is an open-source Python library that provides support for large, multi-dimensional arrays and matrices. It also has a collection of high-level mathematical functions to operate on arrays. NumPy is a general-purpose array-processing package.It provides a high-performance multidimensional array object and tools for working with these arrays. It is the fundamental package for scientific computing with [Python](https://www.geeksforgeeks.org/python-programming-language/).

**TensorFlow**

**TensorFlow**is an open-source**machine learning**library developed by **Google**. TensorFlow is used to build and train deep learning models as it facilitates the creation of computational graphs and efficient execution on various hardware platforms. TensorFlow is basically a software library for numerical computation using  flow graphs where:

* nodes in the graph represent mathematical operations.
* edges in the graph represent the multidimensional data arrays (called tensors) communicated between them.

**Keras**

**Keras** is an open-source deep-learning framework that gained attention due to its user-friendly interface. Keras offers ease of use, flexibility, and the ability to run seamlessly on top of TensorFlow. Keras is a high-level, user-friendly API used for building and training [neural networks](https://www.geeksforgeeks.org/neural-networks-a-beginners-guide/). It is designed to be user-friendly, modular, and easy to extend. Keras allows you to build, train, and deploy deep learning models with minimal code. It provides a high-level API that is intuitive and easy to use, making it ideal for beginners and experts alike.

**Scikit-learn**

**Scikit-learn** has emerged as a powerful and user-friendly Python library. Its simplicity and versatility make it a better choice for both beginners and seasoned data scientists to build and implement machine learning models. It is an open-source[Python](https://www.geeksforgeeks.org/python-programming-language/) library that implements a range of machine learning, pre-processing, cross-validation, and visualization algorithms using a unified interface. It is an open-source machine-learning library that provides a plethora of tools for various [machine-learning](https://www.geeksforgeeks.org/machine-learning/) tasks such as[Classification](https://www.geeksforgeeks.org/basic-concept-classification-data-mining/), [Regression](https://www.geeksforgeeks.org/regression-classification-supervised-machine-learning/), [Clustering](https://www.geeksforgeeks.org/clustering-in-machine-learning/), and many more.

**PyTorch**

PyTorch is defined as an open source machine learning library for Python. It is used for applications such as natural language processing. It is initially developed by Facebook artificial-intelligence research group, and Uber’s Pyro software for probabilistic programming which is built on it. PyTorch redesigns and implements Torch in Python while sharing the same core C libraries for the backend code. PyTorch developers tuned this back-end code to run Python efficiently. They also kept the GPU based hardware acceleration as well as the extensibility features that made Lua-based Torch.