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Batch- 2

Machine Learning Lab

Experiment- 1

Study of various machine learning tools

Pytorch:

PyTorch is a machine learning package for Python that is based on Torch. The torch is a machine learning library, scripting language, and computing framework based on Lua.

Features:

- With the aid of the Autograd Module, neural networks can be constructed.
- Numerous optimization strategies are offered for the construction of neural networks.
- Cloud platforms can make advantage of PyTorch.
- It offers diverse tools, libraries, and dispersed training.

TensorFlow:

A JavaScript library from TensorFlow is available to aid in machine learning. You can develop and train the models with the use of APIs.

Features:

- Aids in developing and training your models.
- With the aid of model converter TensorFlow.js, you can use your current models.
- In the neural network, it is helpful.

Weka:

Data preparation, classification, regression, clustering, association rule mining, and visualisation tools are all provided by this set of machine learning methods for data mining jobs.

Features:

- Classification
- Data preparation
- Regression
- Mining of association rules and clustering visualization.

Apache Mahout

Apache Mahout facilitates the execution of algorithms by statisticians, mathematicians, and data scientists.

Features:

- Pre-processors, Regression, Clustering, Recommenders, and Distributed Linear Algebra are among the many algorithms it offers.
- Common math operations are supported by Java libraries.
- The framework of distributed linear algebra is used.

SAS (previously "Software Analytics System")

SAS is a set of statistical applications that helps with a variety of types of analysis and is generally useful. SAS can provide focus for comparing a large number of variables in multivariate analysis to uncover insights and sort through the "noise" of big data. SAS is able to construct predictive models from large amounts of data in predictive analytics. It is useful for various purposes, including business intelligence.

However, other statistical software packages are frequently used in some specific fields. For instance, SPSS is used more frequently than SAS for statistical analysis in sociology and related fields. As a result, SAS places a greater emphasis on enterprise, raw scientific data, or generative AI results.

IBM SPSS Examination:

It is a measurable programming suite created by IBM for information the executives, progressed examination, multivariate examination, business insight, and criminal examination. SPSS was at first the abbreviation for Factual Bundle for Sociologies, however was subsequently renamed to Measurable Item and Administration Arrangements.