Date:

LAB-1

Exploring The Deep Learning Platforms.

* Various deep Learning platforms

* Aim:-

To Study Various deep Learning Platforms and frame Works and Understand their differences

* Deep Learing platform:-

A deep Learning platform is an environment or Service (often Cloud-based) that Provides tools infrastructure, and Support for building. training. and deploying

1, Google Colab:-

A free cloud-based. Jupyter notebook by google With GPU/TPU Support, ideal for Learning and Prototyping

2, Kaggle Kernals

An online Coding platform from Kaggle With free GPU and dataset access, Used

3, Amazon- Sage maker:-

A cloud ML platform by AWS offering full pipeline Support from training to deployment to enterprise Use.

4, Azure ML Studio:-

A platform by microsoft for building and deploying models Using a drag-and-drop or Cell-based interface.

Key Frame Works of PyTorch, TensorFlow

Tensor Flow:

Creator Organization: Google (2015)

Main features: Scalable across CPU's; GPU's
High Performence model training
Integrated Keras API for Simplicity.
Visulization Via Tensor board.

Popular Use Cases: Computer Vision
ML
NLP

PyTorch:

organisation: Facebook AI Research [FAIR] Creator

⇒ Dynamic computational Graph
Native Pythonic Syntax
strong GPU according Support

Popular Use Cases:
Research & Academic Projects.
NLP models, Fast model Prototyping.

Graph Type: Dynamic.

Result: Successfully implemented.

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