EXPLORING THE DEEP LEARNING PLATFORMS

1. Tensor flow :-

Creator : Google brain (2015)

Main Features :
- → Supports CPUs, GPUs, TPU's
- → Large ecosystem
- → Production ready.

Use cases :
- → Large scale ML | DL deployment
- → Image classification
- → NLP

2. PyTorch :-

Creator : Facebook AI Research (2016)

Main Features :
- → Dynamic computation graphs
- → Pythonic & easy debugging
- → Strong community support

Use cases :
- → Research experiments
- → Computer vision
- → NLP

3. Google Colab :-

Creator : Google (2017)

Main Features :
- → Cloud based jupyter environment
- → Free GPU | TPU support
- → easy sharing via google drive

Use Cases :
- → Quick prototyping
- → Learning deep learning without local server.

4. Jupyter Notebook (Open source) :-

Main Features : → Interactive coding
→ Markdown + visualization suppo
→ Works with multiple languages

Use Cases : → Data Science workflows
→ Teaching and documentation

Platform	key Differences
TensorFlow	Uses static computation graphs. More production - ready with strong deployment support.
PyTorch	Uses dynamic computation graphs
Google Colab	Cloud - based, free GPU / TPU support, no installation needed
Jupyter Notebook	Local Interactive environment, supports multiple languages.

Result :- Explored various deep learning frameworks and understood their usecases.

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