Introduction to Deep Learning

Video 5: Following the “Framework”

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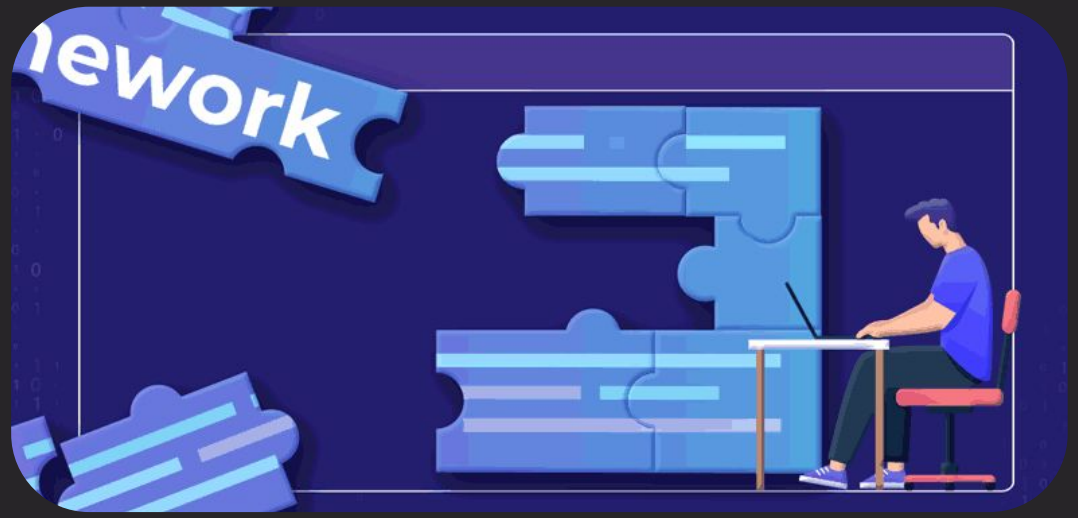
Deep Learning Frameworks



- **Benefits:** Makes coding neural networks simpler.
- **Design:** GPUs/TPUs for accelerated computations
- **Comprehensive toolkits:** From neural layers to optimizers

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Deep Learning Frameworks

Designed for scalability: Managing large datasets with ease

Updates: Ensuring users stay up-to-date with the latest features

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Types of Deep Learning Frameworks

TensorFlow

Created by Google in 2015 and is packed with tools and resources for both ML and DL models.

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Types of Deep Learning Frameworks

Created by Facebook in 2017, popular for tasks such as Computer Vision (CV) and Natural Language Processing (NLP)

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PyTorch 2.0 to build Deep Learning Models

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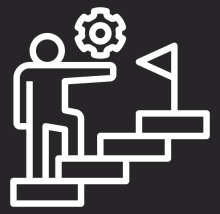
Why PyTorch 2.0?

Great choice for **Deep Learning projects.**.



Improved performance & ability to handle larger, more complex models.

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Why PyTorch 2.0?

Straightforward and User-Interface interface; suitable for beginners and experts.

Features an **extensive suite of tools and libraries** like TorchVision(CV) and TorchText (NLP).

Active development, **regular updates and troubleshooting** support for the community.

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In Air