Wondering what is PyTorch and why it's become the deep learning framework of choice for modern AI systems? PyTorch is an open-source machine learning framework developed by Meta's AI Research lab (FAIR). Since its release in 2016, it's become a cornerstone of deep learning research and production-grade AI systems.

Engineers love PyTorch for its dynamic computation graphs, tight Python integration, and broad ecosystem. But most importantly, it lets you get work done without feeling like you're constantly fighting the framework.

To really understand what is PyTorch and why it's so widely used, we need to look at how it works under the hood.

At the heart of PyTorch is its dynamic computation graph: a decision that fundamentally changes how you write, debug, and scale models. Unlike TensorFlow 1.x, which required pre-defining a static computation graph before execution, PyTorch lets you build graphs on the fly using regular Python control flow. This makes model development radically more flexible.