

What is TensorFlow

- End-to-End Platform for Machine Learning
- Write fast deep learning code in Python, other accessible languages (able to run a GPU/TPU).
- Able to access many pre-built deep learning models (TensorFlow Hub).
- Whole stack: preprocess data, model data, deploy model in your application.
- originally designed and used in-house by Google (now open-source).

Why TensorFlow?

Easy model building:

Build and train ML models easily using intuitive high-level APIs like Keras with eager execution, which makes for immediate model iteration and easy debugging.

debugging.

Robust ML production anywhere:

Easily train and deploy models in the cloud, on prem, in the browser, or on-device no matter what language you use.

Powerful experimentation for research:

A simple and flexible architecture to take new ideas from concept to code, to state-of-art models, and to publication faster.

What is a GPU / TPU:

GPU: Graphical Processing Unit

TPU: Tensor Processing Unit (google's own hardware)