Learning to Use the 'TensorFlow' Library

Saptarshi Pyne, Assistant Professor
Department of Computational and Data Sciences (CDS)
Indian Institute of Science Education and Research (IISER) Kolkata
Mohanpur, West Bengal, India 741246

CS5103 Applied Machine Learning Lectures 3-4
August 6 and 12, 2025

What is TensorFlow

TensorFlow is a machine learning and artificial intelligence library.
Source: https://www.tensorflow.org/

The first version of TensorFlow was developed by Google Brain (now called **Google DeepMind** after Google Brain merged with DeepMind).

The team that developed TensorFlow includes **Geoffrey Hinton** (Nobel Prize in Physics 2024) and **Jeff Dean** (Chief Scientist, Google).

How to Install TensorFlow?

https://www.tensorflow.org/install

Obtain the latest version of pip
> pip install --upgrade pip

Install the latest version of TensorFlow for CPU
> pip install tensorflow

Install the latest version of TensorFlow for GPU (Linux/WSL2)
> pip install tensorflow[and-cuda]

How to Use TensorFlow

Now, let us launch the 'useTensorFlow.ipynb' Jupyter notebook and do some machine learning with it.

Keep Calm
and
Learn Machine Learning

Thank You