Introduction

An overview of the Keras API and how it compares to TensorFlow.

In the **Intro to Keras** section, you will learn about the Keras API, a simple and compact API for creating neural networks. You will use Keras to build a multilayer perceptron model for multiclass classification.

A. The Keras API

The most popular deep learning framework in the world is TensorFlow. It is incredibly powerful, efficient, and widely used in industry. However, a downside to TensorFlow is that the code can be a bit complex, especially when setting up a model for training or evaluation.

A simpler alternative to TensorFlow is Keras. The Keras API is easier to use than TensorFlow, allowing us to create, train, and evaluate a deep learning model with considerably less code. Interestingly, Keras is often run on top of TensorFlow, acting as a wrapper API to make the coding simpler.

While Keras is excellent for building small deep learning projects, TensorFlow is still the preferred framework for industry-level projects since it provides more utilities and efficient training mechanisms.

B. Multilayer perceptron

The MLP model is one of the most important neural networks for deep learning. It is a relatively simple model, but versatile enough for a variety of different applications. In this section, we'll be focusing on the Keras implementation of an MLP, rather than go into details on how it works or what it can be used for.

For specific details on the MLP model, check out the **Intro to Deep Learning** section.