## **Applied Neural Networks With TensorFlow 2.0**

TensorFlow is an open-source machine learning platform with a precise specialize in neural networks, developed via Google Brain team. Despite at the start getting used for interior purposes, Google launched the Apache License 2.0 in November 2015, which made it an open-source library. Although the utilization instances of TensorFlow don't seem to be constrained to machine learning applications, machine learning is that area the place we see TensorFlow's strength.

The two programming languages with secure and professional TensorFlow APIs are Python and C. Also, C++, Java, JavaScript, Go, and Swift are different programming languages the place builders may also discover limited-to-extensive TensorFlow compatibility.

### What's New in TensorFlow 2.x

Since its introduction in 2015, TensorFlow has grown into one amongst the essential superior machine learning systems inside the market. Researchers, developers, and firms extensively adopted the applied sciences delivered by way of the TensorFlow team. Around its 4th birthday, TensorFlow 2.0 used to be launched in September 2019. The TensorFlow crew put heaps of effort into simplifying the APIs by way of cleansing up deprecated APIs and lowering duplication. The TensorFlow crew added numerous updates to recognize simplicity and easy use in TensorFlow 2.0. These updates ought to additionally be listed as follows:

- 1. Easy model constructing with Keras and keen execution.
- 2. Robust model deployment in manufacturing stage on any platform
- 3. Robust experimentation for research
- 4. Simplified API due to the fact of cleanups and duplication reduction

## **TensorFlow Serving**

TensorFlow Serving might also be a bendy and high-performance TensorFlow library that allows fashions to be served over HTTP/REST or gRPC/Protocol Buffers. This platform is platform and language-neutral as we will make an HTTP name the use of any programing language.

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#### **TensorFlow Lite**

TensorFlow Lite might also be a lightweight deep learning framework to set up fashions to cellular gadgets (iOS and Android) or embedded units (Raspberry Pi or Edge TPUs). Developers can also pick out a skilled model, convert the mannequin into a compressed fats buffer, and set up to a cell or embedded system with TensorFlow Lite.

### TensorFlow.js

TensorFlow.js allows builders to installation their fashions to net browsers or Node.js environments. Developers additionally can construct and educate fashions in JavaScript inside the browser using a Keras-like API.

