CHAPTER 30

TensorFlow 2.0 and Keras

TensorFlow (TF) is a specialized numerical computation library for deep learning. It is the preferred tool by numerous deep learning researchers and industry practitioners for developing deep learning models and architectures as well as for serving learned models into production servers and software products. This chapter is focused on TensorFlow 2.0.

Navigating Through the TensorFlow API

Understanding the different levels of the TF API hierarchy is critical to working effectively with TF. The task of building a TF deep learning model may be addressed via different TF API levels. An understanding of the API hierarchy provides clarity on implementing neural network models with TF as well as navigating the TF ecosystem. The TF API hierarchy is primarily composed of three API levels, the high-level API, the mid-level API which provides components for building neural network models, and the low-level API. A diagrammatic representation of this is shown in Figure 30-1.