

## **Model Deployment using TensorFlow**

**Duration: 5 Days** 

#### **Target Audience:**

- Data Analyst
- Business Analysts
- Data Scientist

### **Course Objectives:**

- Build and deploy machine learning models in the browser using TensorFlow.js.
- Develop mobile applications with TensorFlow Lite for running machine learning models on devices.
- Utilize TensorFlow Data Services to streamline data pipelines and enhance data processing capabilities.
- Explore advanced deployment scenarios with TensorFlow Extended, TensorFlow Hub, TensorBoard, and Federated Learning.

#### **Course Outlines:**

### **Browser-based Models with TensorFlow.js**

- > Introduction to TensorFlow.js
- > Image Classification in the Browser
- Converting Models to JSON Format
- Transfer Learning with Pre-Trained Models

# **Device-based Models with TensorFlow Lite**

- Device-based models with TensorFlow Lite
- > Running a TF model in an Android App
- Building the TensorFLow model on IOS
- > TensorFlow Lite on devices

# **Data Pipelines with TensorFlow Data Services**

- Data Pipelines with TensorFlow Data Services
- > Splits and Slices API for Datasets in TF
- Exporting Your Data into the Training Pipeline
- Model Performance

#### Advanced Deployment Scenarios with TensorFlow

- TensorFlow Extended
- Sharing pre-trained models with TensorFlow Hub
- > TensorBoard: tools for model training
- Federated Learning