

Training: Google Cloud Vertex AI for Machine Learning Practitioners



TRAINING GOALS:

This instructor-led one-day course is designed for engineers and data scientists familiar with machine learning models who want to become proficient in using Vertex AI for custom model workflows. This practical, hands-on course will provide you with a deep dive into the core functionalities of Vertex AI, enabling you to effectively leverage its tools and capabilities for your ML projects.

What you'll learn

By the end of the course, learners will be able to:

- Understand the key components of Vertex AI and how they work together to support your ML workflows.
- Configure and launch Vertex AI Custom Training and Hyperparameter Tuning Jobs to optimize model performance.
- Organize and version your models using Vertex AI Model Registry for easy access and tracking.
- Configure serving clusters and deploy models for online predictions with Vertex AI Endpoints.
- Operationalize and orchestrate end-to-end ML workflows with Vertex AI Pipelines for increased efficiency and scalability.
- Configure and set up monitoring on deployed models

Audience

Experienced ML engineers and data scientists who want to learn how to use Vertex AI for containerized training, model tuning, deployment, orchestration, and monitoring.

CONSPECT:

- Module 1 - Training, Tuning, and Deploying Models on Vertex AI
 - Objectives
 - Understand Containerized Training Applications
 - Understand Vertex AI Custom Training and Tuning Jobs
 - Understand how to track and version your trained models in Vertex AI Model

Registry

- Understand Online Deployment with Vertex AI Endpoints
- Module 2 - Orchestrating end-to-end Workflows with Vertex AI Pipelines
 - Objectives
 - Understand Kubeflow
 - Understand pre-built and lightweight Python components
 - Understand how to compile and execute pipelines on Vertex AI
- Module 3 - Model Monitoring on Vertex AI
 - Objectives
 - Understand Feature Drift and Skew
 - Understand Model Monitoring for models deployed to Vertex AI Endpoints

REQUIREMENTS:

Experience building and training custom ML models. Familiar with Docker.

Difficulty level



CERTIFICATE:

The participants will obtain certificates signed by Google Cloud Platform.

TRAINER:

Authorized Google Cloud Platform Trainer.