[sfeir] Institute

Google Cloud, Google Cloud | GCP200VERTEXAI

Vertex AI for Machine Learning Practitioners

Learn how to use Vertex AI to create custom machine learning worflows on Google Cloud

1 jour / 7h

Learning outcomes

- 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

Who this course is for

Machine Learning Engineers, Data Scientists

Prerequisites

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

Course Outline

Module 01 : Training, Tuning, and Deploying Models on Vertex AI

Topics

- 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

Activities

- Lab: Train, Tune, and Serve Models with Vertex AI

Module 02 : Orchestrating end-to-end Workflows with Vertex AI Pipelines

Topics

- Understand Kubeflow
- Understand pre-built and lightweight Python components
- Understand how to compile and execute pipelines on Vertex AI

Activities

- Lab: Orchestrating an AutoML Based Pipeline with Vertex AI Pipelines
- Lab: Orchestrate Custom Training and Tuning Pipeline with Pre-Built Components
- Lab: Orchestrate Custom Training and Tuning Pipeline with Lightweight Python Components

Module 03 : Model Monitoring on Vertex AI

Topics

- Understand Feature Drift and Skew
- Understand Model Monitoring for models deployed to Vertex AI Endpoints

Activities

- Lab: Vertex AI Model Monitoring