Introduction to Vertex AI by Google
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Vertex AI

Introduction

- Vertex AI is a unified machine learning (ML) platform that helps you build, deploy, and scale ML models.

- It provides a single, integrated experience for the entire ML lifecycle, from data preparation to model training to deployment.

- Vertex AI is built on top of Google Cloud's infrastructure, so you can be confident that your models will be scalable, reliable, and secure.

Concepts

- Datasets: Datasets are the foundation of Vertex AI. They store your data in a format that Vertex AI can understand and use.

- Models: Models are the output of the ML training process. They are mathematical representations of the relationships between your data and the desired output.

- Endpoints: Endpoints are the way that you make predictions from your models. They are hosted in the cloud and can be accessed by your applications.

Framework

- AutoML: AutoML is a codeless service that can automatically train and deploy ML models for you.

- Kubeflow Pipelines: Kubeflow Pipelines is a framework for building and deploying ML pipelines.

- TensorFlow: TensorFlow is an open-source framework for machine learning.

Applications

- Image classification: Vertex AI can be used to classify images, such as identifying objects in a photo.

- Natural language processing: Vertex AI can be used to process natural language, such as understanding the meaning of a sentence.

- Fraud detection: Vertex AI can be used to detect fraud, such as identifying fraudulent credit card transactions.

Conclusion

- Vertex AI is a powerful ML platform that can help you build, deploy, and scale ML models.

- It is a comprehensive platform that provides a single, integrated experience for the entire ML lifecycle.

- Vertex AI is built on top of Google Cloud's infrastructure, so you can be confident that your models will be scalable, reliable, and secure.