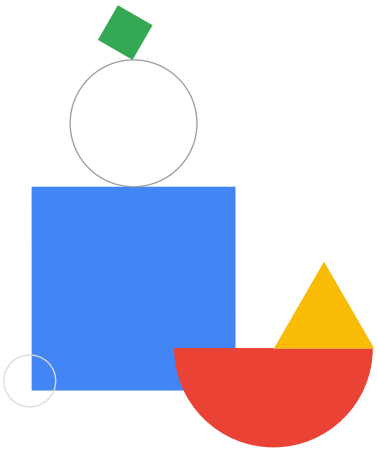
Google Cloud

Smart Analytics, Machine Learning and AI on Google Cloud



Course Summary

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- AI's impact on industry is huge.
- Predictive modeling takes data-driven decision making to a new level.
- The typical data science workflow.
- Notebooks are ideal for prototyping machine learning pipelines and models.
- Notebooks integrate nicely with BigQuery and other Google Cloud services.
- Use BigQuery's analytic window functions for advanced analysis.
- BigQuery has built in GIS functionality.
- Use BigQuery's WITH clause to help modularize your queries.
- There are many ways to optimize your query performance.

Course summary

- Use ML on Google Cloud using either
  - Vertex AI (your model, your data)
  - AutoML (our models, your data)
  - Perception API (our models, our data)
- Use Kubeflow to deploy end-to-end ML pipelines.
- Don't reinvent the wheel for your ML pipeline! Leverage pipelines on AI Hub.
- You can train and evaluate machine learning models directly in BigQuery.
- AutoML can be used to create powerful ML models without any coding
- Use AutoML Vision when you have image data.
- Use AutoML Natural Language when you have text data.
- Use AutoML Tables when you have structured data.

Data Engineering learning path

1. Modernizing Data Lakes and Data Warehouses with Google Cloud
2. Building Batch Data Pipelines on Google Cloud
3. Building Resilient Streaming Analytics Systems on Google Cloud
4. Smart Analytics, Machine Learning and AI on Google Cloud

Congratulations on completing **Smart Analytics, Machine Learning and AI on Google Cloud**, the fourth and final course of the Data Engineering Learning Path.