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Data Engineering on  
Google Cloud Platform  
**Analytics and AI**  
Course Summary

Hello and welcome to our course on data engineering.  
My name is ...

## Course Summary

- AI's impact on industry is huge
- Predictive modeling takes data-driven decision making to a new level
- The typical data science work-flow

## Course Summary

- AI Platform Notebooks are ideal for prototyping machine learning pipelines and models
- Notebooks integrate nicely with BigQuery and other GCP services

## Course Summary

- 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 GCP using either
  - AI Platform (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

## Course Summary

- You can train and evaluate machine learning models directly in BigQuery

## Course Summary

- Cloud AutoML can be used to create powerful ML models without any coding
- Use AutoML Vision when you have image data
- Use AutoML NLP when you have text data
- Use AutoML Tables when you have structured data