Smart Analytics, Machine Learning, and AI on Google Cloud

Introduction

Introduction to Analytics and AI

- Module introduction
- What is AI?
- From ad-hoc data analysis to data-driven decisions
- Options for ML models on Google Cloud

Prebuilt ML Model APIs for Unstructured Data

- Module introduction
- Unstructured data is hard
- ML APIs for enriching data
- LAB : Using the Natural Language API to classify unstructured text
- Prebuilt ML Model APIs for Unstructured Data

Big Data Analytics with Notebooks

- Module introduction
- What's a Notebook?
- BigQuery magic and ties to Pandas
- LAB : BigQuery in JupyterLab on Vertex AI
- Big Data Analytics with Notebooks

Production ML Pipelines

- Module introduction
- Ways to do ML on Google Cloud
- Vertex AI Pipelines
- AI Hub
- LAB : Running Pipelines on Vertex AI

Custom Model Building with SQL in BigQuery ML

- Module introduction
- BigQuery ML for Quick Model Building
- Supported models
- LAB : Predict Bike Trip Duration with a Regression Model in BQML
- LAB : Movie Recommendations in BigQuery ML

Custom Model Building with AutoML

- Module introduction
- Why AutoML?
- AutoML Vision
- AutoML Natural Language Processing
- AutoML Tables