

Applying Machine Learning to your Data with Google Cloud

Introduction

- Course Introduction

Introduction to Machine Learning

- Introduction to Machine Learning
- Demo: Google Photos
- What is deep learning?
- ML applications for business
- ML terms: Instances, features, labels
- The spectrum of ML tools

Pre-trained ML APIs

- Pre-trained ML models
- Demo: Cloud Translate and Vision APIs
- Explore the Vision API
- Demo: Natural Language Processing API
- Explore the Language API
- LAB : Training with Pre-built ML Models using Cloud Vision API and AutoML

Creating ML Datasets in BigQuery

- What makes a dataset good for ML?

- Choosing good features
- Exploring and preprocessing data
- Other tools for creating data pipelines
- Knowing the unknowable
- Creating repeatable dataset splits
- LAB : Creating Repeatable Dataset Splits in BigQuery v1.5

Creating ML Models in BigQuery

- Introducing BigQuery machine learning
- Phases of model building
- Lab Intro: Predicting Visitor Return Purchases with BigQuery
- LAB : Predict Visitor Purchases with a Classification Model in BQML v1.5
- LAB : Predict Taxi Fare with a BigQuery ML Forecasting Model v1.5
- Demo: AutoML Tables