Welcome

Google Cloud Platform Fundamentals: Big Data and Machine Learning

Version #1.1

Logistics

Parking

Facilities

Food

https://pixabay.com/en/interior-design-tables-chairs-2591368/ (cc0)
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https://pixabay.com/en/food-prawn-asian-715539/ (cc0)

Being engaged will help you get the most out of the course

Silence your phone

Don't record this class

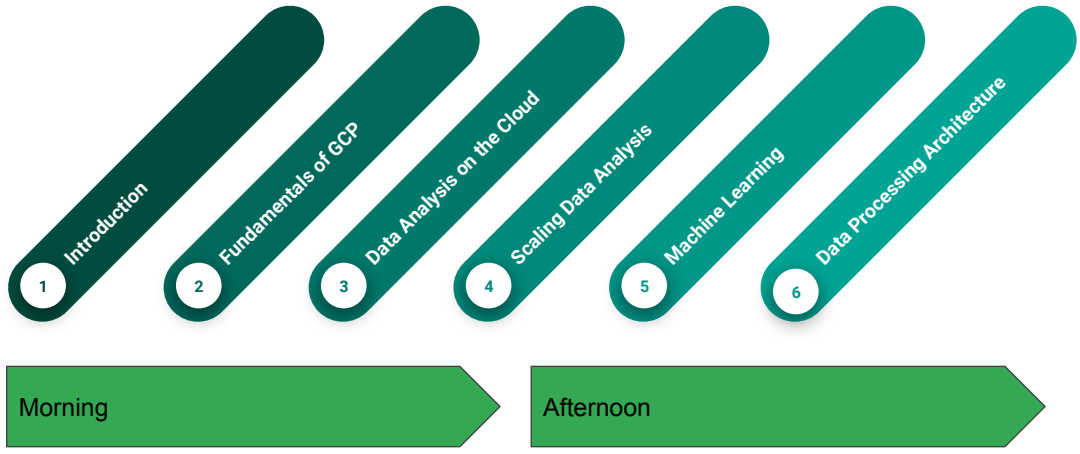
Ask questions

Google Cloud

Notes:

In a virtual class (Hangouts on Air), use the Q&A feature to ask questions. The instructor will *verbally* answer those questions.

The course begins with a quick overview of Google Cloud, then provides a deep overview on its data processing capabilities



Google Cloud

Notes:

1. Introduction

Overview of GCP as a whole, but with emphasis on the data-handling aspects of the platform

- GCP, GCP Big Data
- Usage scenarios
- Create an account on GCP

2. Foundation of GCP

Compute and Storage with a focus on their value in data ingest, storage, and federated analysis

- Compute Engine
- Cloud Storage
- Start GCE instance
- Upload data to GCS

3. Data analytics on the Cloud

Common use cases that Google manages for you and for which there is an easy migration path to the Cloud

- Cloud SQL
- Dataproc
- Import data into and query Cloud SQL
- Machine Learning with Dataproc

In the morning, we will complete Modules 1 and 2 and get halfway through Module 3.

4a. Scaling data analysis
Change how you compute, not just where you compute with GCP
- Datalab
- Datastore, Big Table
- BigQuery

5. TensorFlow
Change how you compute, not just where you compute with GCP
- TensorFlow
- Datalab instance
- BigQuery
- Demand forecasting with ML

6. Data processing architectures
Scaleable, reliable data processing on GCP
- Pub/Sub
- Dataflow

7. Summary
Course summary
- Resources

Please feel free to use the appendixes for self-study.
In the morning, we will get halfway through Module 3.

Please feel free to use the appendixes for self-study.

Meet the instructor

- Your instructor
  - Background
  - Course goals
- You
  - Name
  - Organization
  - Job role
  - Course goals


cloud.google.com
Image by Connie Zhou