

Baseline: Data, ML, AI

Introductory 6 Steps 5 hours 14 Credits

Big data, machine learning, and artificial intelligence are today's hot computing topics, but these fields are quite specialized and introductory material is hard to come by. Fortunately, Google Cloud provides user-friendly services in these areas and Qwiklabs has you covered with this introductory-level quest, so you can take your first steps with tools like Big Query, Cloud Speech API, and AI Platform. Want extra help? [1-minute videos walk you through key concepts for each lab.](#)

Data Machine Learning

Prerequisites:

This Quest builds on a basic understanding of Google Cloud services. It is recommended that the student have earned a Badge by completing the hands-on labs in the [Getting Started - Create and Manage Cloud Resources Quest](#) before beginning.

Quest Outline

[AI Platform: Qwik Start](#)

In this lab you train and deploy a TensorFlow model to AI Platform for serving (prediction). Watch these short videos [Harness the Power of Machine Learning with AI Platform](#) and [AI Platform: Qwik Start - Qwiklabs Preview](#).

1 hour

Introductory

1 Credit

[Dataprep: Qwik Start](#)

Google Cloud Dataprep is an intelligent data service for visually exploring, cleaning, and preparing data for analysis. Watch the short video [Dataprep: Qwik Start - Qwiklabs Preview](#).

1 hour

Introductory

1 Credit

[Dataflow: Qwik Start - Templates](#)

This page shows you how to create a streaming pipeline using a Google-Provided Cloud Dataflow template.

30 minutes

Introductory

1 Credit

[Dataflow: Qwik Start - Python](#)

In this lab you will set up your Python development environment, get the Cloud Dataflow SDK for Python, and run an example pipeline using the Google Cloud Platform Console.

30 minutes

Introductory

1 Credit

[Dataproc: Qwik Start - Console](#)

This lab shows you how to create a Google Cloud Dataproc cluster, run a simple Apache Spark job in the cluster, then modify the number of workers in the cluster, all from the Cloud Command Line. Watch these short videos, [Dataproc: Qwik Start - Qwiklabs Preview](#) and [Run Spark and Hadoop Faster with Cloud Dataproc](#).

30 minutes

Introductory

1 Credit

[Dataproc: Qwik Start - Command Line](#)

This lab shows you how to create a Google Cloud Dataproc cluster, run a simple Apache Spark job in the cluster, then modify the number of workers in the cluster, all from the Google Cloud Command Line. Watch these short videos, [Dataproc: Qwik Start - Qwiklabs Preview](#) and [Run Spark and Hadoop Faster with Cloud Dataproc](#).

30 minutes

Introductory

1 Credit

[Cloud Natural Language API: Qwik Start](#)

The Cloud Natural Language API lets you extract entities and perform sentiment and syntactic analysis on text. Watch these short videos [Gain Valuable Insights from Text with Cloud Natural Language](#) and [Cloud Natural Language: Qwik Start - Qwiklabs Preview](#).

40 minutes

Introductory

1 Credit

[Google Cloud Speech API: Qwik Start](#)

The Google Cloud Speech API integrates speech recognition into dev apps; you can now send audio/receive a text transcription. Watch these short videos [Powerful Speech Recognition Using Google Machine Learning](#) and [Google Cloud Speech: Qwik Start - Qwiklabs Preview](#)

15 minutes

Introductory

1 Credit

[Video Intelligence: Qwik Start](#)

In this lab use the Google Cloud Video intelligence app to extract metadata from a sample video file. Watch the short video [Google Cloud Video Intelligence - Search every moment of every video in your catalog](#).

30 minutes

Introductory

1 Credit

[Reinforcement Learning: Qwik Start](#)

In this lab, you will learn and get hands-on practice with the fundamental concepts of Reinforcement Learning.

45 minutes

Fundamental

5 Credits

Quest Complete!

Congrats! You completed this quest and earned a badge. Become a cloud expert and start another.

