

Machine Learning APIs

Advanced 6 Steps 5 hours 36 Credits

It's no secret that machine learning is one of the fastest growing fields in tech, and Google Cloud has been instrumental in furthering its development. With a host of APIs, Google Cloud has a tool for just about any machine learning job. In this advanced-level quest, you will get hands-on practice with machine learning APIs by taking labs like Detect Labels, Faces, and Landmarks in Images with the Cloud Vision API. Looking for a hands-on challenge lab to demonstrate your skills and validate your knowledge? On completing this quest, enroll in and finish the additional challenge lab at the end of [this quest](#) to receive an exclusive Google Cloud digital badge.

Infrastructure Application Development Data Machine Learning

Prerequisites:

This Quest requires hands-on experience with Google Cloud's machine learning services. Make sure that you have at least earned a Badge by completing the hands-on labs in the [Baseline: Data, ML, and AI](#) Quest before beginning—the labs in this series assume foundational ML knowledge and will explore advanced features through specific use cases.

Quest Outline

[Introduction to APIs in Google](#)

This lab will teach you about the architecture and basic functioning of Application Programming Interfaces (APIs). This will be supplemented with hands-on practice, where you will configure and run Cloud Storage API methods in Cloud Shell.

45 minutes

Introductory

1 Credit

[Extract, Analyze, and Translate Text from Images with the Cloud ML APIs](#)

In this lab you'll combine the Cloud Vision, Natural Language, and Translation APIs to capture text strings from images, recognize characters, and analyze and translate the text strings into other languages.

50 minutes

Expert

9 Credits

[Classify Text into Categories with the Natural Language API](#)

In this lab you'll learn how to classify text into categories using the Natural Language API

1 hour

Advanced

7 Credits

[Detect Labels, Faces, and Landmarks in Images with the Cloud Vision API](#)

The Cloud Vision API lets you understand the content of an image by encapsulating powerful machine learning models in a simple REST API. In this lab you'll send an image to the Cloud Vision API and have it identify objects, faces, and landmarks.

30 minutes

Advanced

7 Credits

[Entity and Sentiment Analysis with the Natural Language API](#)

The Cloud Natural Language API lets you extract entities, and perform sentiment and syntactic analysis on a block of text. In this hands-on lab you'll learn how to extract entities and sentiment from text using the Cloud Natural Language API.

40 minutes

Fundamental

5 Credits

[Awwvision: Cloud Vision API from a Kubernetes Cluster](#)

This hands-on lab uses Kubernetes and Cloud Vision API to create an example of how to use the Vision API to classify (label) images from Reddit's /r/aww subreddit and display the labelled results in a web app.

45 minutes

Advanced

7 Credits

Quest Complete!

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

