

# BigQuery for Machine Learning

Fundamental 5 Steps 5 hours 25 Credits

Want to build ML models in minutes instead of hours using just SQL? BigQuery ML democratizes machine learning by letting data analysts create, train, evaluate, and predict with machine learning models using existing SQL tools and skills. In this series of labs, you will experiment with different model types and learn what makes a good model. 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.

## Prerequisites:

It is recommended that students have familiarity with SQL and completed the [BigQuery Basics for Data Analysts](#) Quest before attempting these labs.

## Quest Outline

### [Getting Started with BQML](#)

In this lab you'll learn how to use BigQuery to create machine learning models for datasets to create a model that predicts whether a visitor will make a transaction.

45 minutes

Introductory

1 Credit

### [Predict Visitor Purchases with a Classification Model in BQML](#)

In this lab you will use a newly available ecommerce dataset to run some typical queries that businesses would want to know about their customers' purchasing habits.

1 hour

Advanced

7 Credits

### [Predict Taxi Fare with a BigQuery ML Forecasting Model](#)

In this lab you will explore millions of New York City yellow taxi cab trips available in a BigQuery Public Dataset, create a ML model inside of BigQuery to predict the fare, and evaluate the performance of your model to make predictions.

1 hour

Advanced

7 Credits

### [Bracketology with Google Machine Learning](#)

In this lab you use Machine Learning (ML) to analyze the public NCAA dataset and predict NCAA tournament brackets.

1 hour

Fundamental

5 Credits

### [Implement a Helpdesk Chatbot with Dialogflow & BigQuery ML](#)

In this lab you will train a simple machine learning model for predicting helpdesk response time using BigQuery Machine Learning.

1 hour

Fundamental

5 Credits

## Quest Complete!

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

