Google Cloud

Serverless Machine Learning with Cloud ML

Welcome to Serverless Machine Learning with Cloud ML

Introductions

Your instructor + You

Background

Position

Organization

Introductions:
- Your instructor + You
- Background
- Position
- Organization

Facilities:
- Parking
- Facilities
- Food

Course etiquette:
- Recording this class is prohibited.
- Please silence your phone and take calls outside.
- Ask questions interactively or via chat (online).

Audience and prerequisites

Target Audiences

experienced developers who are responsible for managing big data transformations, including:

- Creating and maintaining machine learning and statistical models
- Querying datasets, visualizing query results and creating reports

Prerequisites

- Completed [Google Cloud Fundamentals: Big Data & Machine Learning course](#) OR have equivalent experience
- Basic proficiency with common query language such as SQL
- Experience with data modeling, extract, transform, load activities
- Developing applications using a common programming language such as Python
- Familiarity with Machine Learning and/or statistics

Learn how to

Identify use cases for Machine Learning

Build an ML model using TensorFlow

Build scalable, deployable ML models using Cloud ML

Express the importance of preprocessing and combining features

Apply advanced ML concepts into your models

Serverless Machine Learning with Cloud ML

Module		Labs
1	**Getting started with Machine Learning**	• Explore dataset, create ML datasets, create benchmark
2	**Building Machine Learning models with TensorFlow**	• Getting Started with TensorFlow • Machine Learning using tf.estimator • Refactoring to add batching • Distributed training and monitoring
3	**Scaling TF models with Cloud ML Engine**	• Scaling up ML using Cloud ML Engine
4	**Improving ML through feature engineering**	• Feature Engineering

Lab Environment

QWIKLABS

For each lab, Qwiklabs offers:

- A free set of resources for a fixed amount of time
- A clean environment with permissions

This course includes interactive hands-on labs through the Qwiklabs platform.

Qwiklabs provisions you with Google account credentials, so you can access the GCP Console for each lab at no cost. Specifically, for each lab, Qwiklabs offers:
- A free set of resources for a fixed amount of time
- A clean environment with permissions

Open Qwiklabs

1 **Open an incognito window**
(or private/anonymous window)

4 Launch the course from **My Learning**

2 **Go** to events.qwiklabs.com

- ♠ Home
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- ▤ My Learning
- ▤ Labs
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- ❓ Help

3 **Sign In** with existing account or **Join** with new account (with email you used to register for the bootcamp)

Let's go ahead an open Qwiklabs:
1. **Open an incognito window** (or private/anonymous window). Use of an incognito browser window reduces the risk that you will accidentally do the labs using your own GCP account rather than Qwiklabs'.
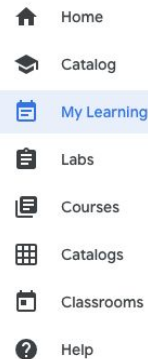2. **Go** to events.qwiklabs.com.
3. **Sign** In with existing account or **Join** with new account (with email you used to register for the bootcamp).
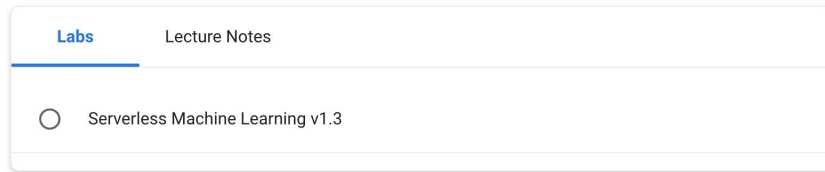4. Launch the course from **My Learning**.

View your labs

Labs   Lecture Notes

○   Serverless Machine Learning v1.3

Do NOT launch a lab until instructed to do so!

After you launch the course, you can view your labs. The lab list will indicate if a lab is:
- Completed (by you)
- Active
- Or not yet available

Your instructor will let you know when it's time to launch a lab. Once you start a lab, you won't be able to pause and restart it, so you'll need a continuous block of time to complete the work.
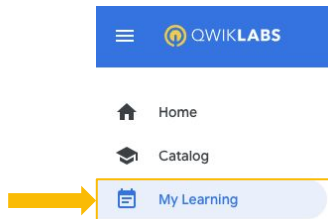
View lecture notes

Labs	**Lecture Notes**

00 Welcome to Serverless Machine Learning with Cloud ML

01 Serverless Machine Learning with Cloud ML_GettingStartedWithML (ML) v1.4.pdf

02 Serverless Machine Learning with Cloud ML_TensorFlow (ML) v1.4

03 Serverless Machine Learning with Cloud ML_CloudML (ML) v1.4

04 Serverless Machine Learning with Cloud ML_FeatureEngineering (ML) v1.4
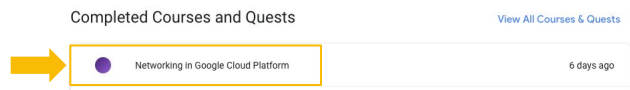
Within the course, you can also view the lecture notes. You can download these as PDF files.

End of class - Materials

1 Click on *My Learning* in the left-hand navigation bar

2 Select the class from the *Completed Courses* list

QWIKLABS

- Home
- Catalog
- My Learning

Completed Courses and Quests — View All Courses & Quests

Networking in Google Cloud Platform — 6 days ago

Materials are available for 2 years

You can view the course materials within Qwiklabs as follows:
1. Click on *My Learning* in the left-hand navigation bar.
2. Select the class from the *Completed Courses* list.

Materials are available for 2 years following the completion of a course.

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1 MONTH FREE

Data Engineering on
Google Cloud Platform

Google Cloud

SPECIALIZATION (5 COURSES)

3 Complete checkout. A credit card is required for checkout, but will not be charged for the first month and the subscription can be canceled any time.

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