



- Expert Verified, Online, Free.

MENU



Google Discussions



Exam Professional Machine Learning Engineer All Questions

View all questions & answers for the Professional Machine Learning Engineer exam

Go to Exam

EXAM PROFESSIONAL MACHINE LEARNING ENGINEER TOPIC 1 QUESTION 124 DISCUSSI...

Actual exam question from Google's Professional Machine Learning Engineer

Question #: 124

Topic #: 1

[\[All Professional Machine Learning Engineer Questions\]](#)

You are an ML engineer responsible for designing and implementing training pipelines for ML models. You need to create an end-to-end training pipeline for a TensorFlow model. The TensorFlow model will be trained on several terabytes of structured data. You need the pipeline to include data quality checks before training and model quality checks after training but prior to deployment. You want to minimize development time and the need for infrastructure maintenance. How should you build and orchestrate your training pipeline?

- A. Create the pipeline using Kubeflow Pipelines domain-specific language (DSL) and predefined Google Cloud components. Orchestrate the pipeline using Vertex AI Pipelines.
- B. Create the pipeline using TensorFlow Extended (TFX) and standard TFX components. Orchestrate the pipeline using Vertex AI Pipelines.
- C. Create the pipeline using Kubeflow Pipelines domain-specific language (DSL) and predefined Google Cloud components. Orchestrate the pipeline using Kubeflow Pipelines deployed on Google Kubernetes Engine.
- D. Create the pipeline using TensorFlow Extended (TFX) and standard TFX components. Orchestrate the pipeline using Kubeflow Pipelines deployed on Google Kubernetes Engine.



Show Suggested Answer

by [hiromi](#) at Dec. 21, 2022, 11:40 p.m.

Comments

Type your comment...

Submit


  **fitri001** 6 months, 2 weeks ago

Selected Answer: B

TFX for TensorFlow Models: TensorFlow Extended (TFX) is an end-to-end machine learning platform built on top of TensorFlow. It provides a set of pre-built components specifically designed for TensorFlow models, simplifying development and ensuring compatibility.

Vertex AI Pipelines for Orchestration: Vertex AI Pipelines, a managed service from Google Cloud, is ideal for orchestrating ML pipelines. It integrates seamlessly with TFX and provides features like monitoring, scheduling, and scaling, reducing infrastructure maintenance needs.

   upvoted 3 times

  **fitri001** 6 months, 2 weeks ago

A. Kubeflow Pipelines with Predefined Components: While Kubeflow Pipelines offer a DSL for building pipelines, using standard TFX components within Vertex AI Pipelines offers a more streamlined solution designed for TensorFlow models.
C & D. Kubeflow Pipelines with Manual Deployment: Both options involve using Kubeflow Pipelines, but deploying it on Google Kubernetes Engine requires additional infrastructure management compared to using the managed service, Vertex AI Pipelines.

   upvoted 4 times

  **NickHapton** 1 year, 4 months ago

B.

why not C? as the question content mentioned, this model is built by tensorflow

   upvoted 2 times

  **SamuelTsch** 1 year, 4 months ago

Selected Answer: B

B should be correct

   upvoted 2 times

  **M25** 1 year, 6 months ago

Selected Answer: B

Went with B

   upvoted 3 times

  **JamesDoe** 1 year, 7 months ago

Selected Answer: B

B.

Straight from the docs: <https://cloud.google.com/vertex-ai/docs/pipelines/build-pipeline#sdk>

   upvoted 4 times



  **TNT87** 1 year, 8 months ago

Selected Answer: B

B. Create the pipeline using TensorFlow Extended (TFX) and standard TFX components. Orchestrate the pipeline using Vertex AI Pipelines.

TFX provides a set of standard components for building end-to-end ML pipelines, including data validation and model analysis. Vertex AI Pipelines is a fully managed service for building and orchestrating machine learning pipelines on Google Cloud.



   upvoted 2 times

  **ares81** 1 year, 10 months ago

Selected Answer: B

It's B!

   upvoted 2 times

  **egdiaa** 1 year, 10 months ago

Selected Answer: B

Reference: <https://www.tensorflow.org/tfx/guide/tfdv>

   upvoted 3 times

  **hiromi** 1 year, 10 months ago

Selected Answer: B

B (not sure)

   upvoted 3 times

Start Learning for free



Social Media

[Facebook](#) , [Twitter](#)

[YouTube](#) , [Reddit](#)

[Pinterest](#)



We are the biggest and most updated IT certification exam material website.

Using our own resources, we strive to strengthen the IT professionals community for free.



© 2024 ExamTopics

ExamTopics doesn't offer Real Microsoft Exam Questions. ExamTopics doesn't offer Real Amazon Exam Questions. ExamTopics Materials do not contain actual questions and answers from Cisco's Certification Exams.

CFA Institute does not endorse, promote or warrant the accuracy or quality of ExamTopics, CFA® and Chartered Financial Analyst® programs.

