EXAM PROFESSIONAL MACHINE LEARNING ENGINEER TOPIC 1 QUESTION 168 DISCUSSI...

Actual exam question from Google's Professional Machine Learning Engineer
Question #: 168
Topic #: 1
[All Professional Machine Learning Engineer Questions]

You need to develop an image classification model by using a large dataset that contains labeled images in a Cloud Storage bucket. What should you do?

A. Use Vertex AI Pipelines with the Kubeflow Pipelines SDK to create a pipeline that reads the images from Cloud Storage and trains the model.

B. Use Vertex AI Pipelines with TensorFlow Extended (TFX) to create a pipeline that reads the images from Cloud Storage and trains the model.

C. Import the labeled images as a managed dataset in Vertex AI and use AutoML to train the model.

D. Convert the image dataset to a tabular format using Dataflow Load the data into BigQuery and use BigQuery ML to train the model.

Show Suggested Answer

by b1a8fae at *Jan. 8, 2024, 3:59 p.m.*

Comments

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AzureDP900 4 months ago

B is right in my opinion, while both options C and B involve importing labeled images into Vertex AI, using AutoML for image classification might not be the most suitable choice. TFX is a more specialized tool that provides a robust pipeline framework specifically designed for image classification tasks, making it a better fit for this particular use case.

upvoted 1 times

pinimichele01 6 months, 2 weeks ago

Selected Answer: C

https://cloud.google.com/vertex-ai/docs/tutorials/image-classification-automl/dataset

upvoted 1 times

pinimichele01 5 months, 4 weeks ago

no need to use a pipeline, automl is ok

upvoted 1 times

guilhermebutzke 8 months, 2 weeks ago

Selected Answer: B

My answer: B

TensorFlow Extended (TFX) and Kubeflow provide capabilities for building machine learning pipelines that can handle data stored in Google Cloud Storage (GCS). However, when it comes to ease of use specifically for working with data in GCS, TFX may have a slight edge over Kubeflow for
1- Integration with GCS- TensorFlow: TFX is tightly integrated with TensorFlow that has built-in support for GCS and provides convenient APIs for reading data directly from GCS buckets
2 - Abstraction of Data Handling TFX provides higher-level abstractions and components specifically designed for common machine learning tasks, including data preprocessing, model training, and model evaluation

upvoted 4 times

pinimichele01 5 months, 4 weeks ago

Which SDK use?
• If you use TensorFlow in an ML workflow that processes terabytes of structured data or text data -> TFX
• For other use-cases -> KFP

upvoted 2 times

winston9 9 months, 1 week ago

Selected Answer: C

It's C

upvoted 3 times

BlehMaks 9 months, 2 weeks ago

Selected Answer: A

95th is the similar question. https://cloud.google.com/vertex-ai/docs/pipelines/build-pipeline#sdk

upvoted 1 times

winston9 9 months, 1 week ago

95 is a similar question but it does not offer Vertex AI AutoML as an option. which I think it's the right answer here consider the little amount of info provided in the question

upvoted 1 times

b1a8fae 9 months, 2 weeks ago

Selected Answer: C

Very vaguely put. I choose C over B just because it sounds like a simpler approach, but both should theoretically work.

upvoted 2 times

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