EXAMTOPICS

- 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 237 DISCUSSI...**

Actual exam question from Google's Professional Machine Learning Engineer

Question #: 237

Topic #: 1

[All Professional Machine Learning Engineer Questions]

You are developing a model to identify traffic signs in images extracted from videos taken from the dashboard of a vehicle. You have a dataset of 100,000 images that were cropped to show one out of ten different traffic signs. The images have been labeled accordingly for model training, and are stored in a Cloud Storage bucket. You need to be able to tune the model during each training run. How should you train the model?

- A. Train a model for object detection by using Vertex AI AutoML.

- B. Train a model for image classification by using Vertex AI AutoML.

- C. Develop the model training code for object detection, and train a model by using Vertex AI custom training.

- D. Develop the model training code for image classification, and train a model by using Vertex AI custom training.

Show Suggested Answer

by 👤 **pikachu007** at *Jan. 13, 2024, 8:23 a.m.*

Comments

Type your comment...

Submit

pikachu007 `Highly Voted` 9 months, 1 week ago

Not A or B since automl doesnt provide you without flexibility to tune.

Not C because object detection is not required since the images are cropped to a single traffic light

👍 ↩ 🚩 upvoted 14 times

Dirtie_Sinkie `Most Recent ⊘` 1 month ago

Answer is D, not C in my opinion. Object detection might be used in a real-world project since there are a lot of variables which may affect the picture like visibility, colour fading, having other things in the picture like streetlights, birds, etc. Way too overkill for our question here. I'm assuming the pictures are already nicely cropped out with none of this extra stuff in the pictures.

👍 ↩ 🚩 upvoted 1 times

baimus 1 month, 1 week ago

There is literally no way to know if this is C or D, as "labelled" and "identify street signs" are too ambiguous to know if its detection or classification. The "cropped to a single traffic light" seems like maybe D, but that's hardly ML knowledge, it's a pub quiz guess.

👍 ↩ 🚩 upvoted 1 times

gscharly 6 months ago

agree with pikachu007

👍 ↩ 🚩 upvoted 1 times

pinimichele01 6 months, 2 weeks ago

Not C because object detection is not required since the images are cropped to a single traffic light

👍 ↩ 🚩 upvoted 1 times

guilhermebutzke 8 months, 1 week ago

Correct: C

The phrases "identify traffic signs in images extracted from videos" and "images that were cropped to show one out of ten different traffic signs" suggest that this is an image detection problem. The first phrase appears to have the same meaning as "images with," and the second phrase suggests that only one type of traffic sign was used in the problem, indicating that it cannot be used in a multi-class problem. For all these reasons, I believe the best option is C.

👍 ↩ 🚩 upvoted 2 times

guilhermebutzke 8 months, 1 week ago

My answer: C

The phrases "identify traffic signs in images extracted from videos" and "images that were cropped to show one out of ten different traffic signs" suggest that this is an image detection problem. The first phrase appears to have the same meaning as "images with," and the second phrase suggests that only one type of traffic sign was used in the problem, indicating that it cannot be used in a multi-class problem. For all these reasons, I believe the best option is C.

👍 ↩ 🚩 upvoted 2 times

Start Learning for free

Social Media

Facebook , Twitter
YouTube , Reddit
Pinterest

EXAMTOPICS

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.