



- 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 193 DISCUSSI...

Actual exam question from Google's Professional Machine Learning Engineer

Question #: 193

Topic #: 1

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

Your company stores a large number of audio files of phone calls made to your customer call center in an on-premises database. Each audio file is in wav format and is approximately 5 minutes long. You need to analyze these audio files for customer sentiment. You plan to use the Speech-to-Text API. You want to use the most efficient approach. What should you do?

- A. 1. Upload the audio files to Cloud Storage  
2. Call the speech:longrunningrecognize API endpoint to generate transcriptions  
3. Call the predict method of an AutoML sentiment analysis model to analyze the transcriptions.
- B. 1. Upload the audio files to Cloud Storage.  
2. Call the speech:longrunningrecognize API endpoint to generate transcriptions  
3. Create a Cloud Function that calls the Natural Language API by using the analyzeSentiment method
- C. 1. Iterate over your local files in Python  
2. Use the Speech-to-Text Python library to create a speech.RecognitionAudio object, and set the content to the audio file data  
3. Call the speech:recognize API endpoint to generate transcriptions  
4. Call the predict method of an AutoML sentiment analysis model to analyze the transcriptions.
- D. 1. Iterate over your local files in Python  
2. Use the Speech-to-Text Python Library to create a speech.RecognitionAudio object and set the content to the audio file data  
3. Call the speech:longrunningrecognize API endpoint to generate transcriptions.  
4. Call the Natural Language API by using the analyzeSentiment method

Show Suggested Answer

by  pikachu007 at Jan. 13, 2024, 3:54 a.m.

## Comments

Type your comment...

Submit

  **guilhermebutzke** Highly Voted  8 months, 3 weeks ago

**Selected Answer: B**

My answer: B

According to <https://cloud.google.com/vertex-ai/docs/text-data/sentiment-analysis/prepare-data>, AutoML sentiment analysis requires a minimum of 10 labeled training documents per sentiment category, with a maximum of 100,000 total training documents. This means you need to ensure you have an adequate amount of labeled data to train a reliable model. Therefore, option B is more suitable since the API will return the sentiment and there is no mention of a customized problem that justifies the use of AutoML.


   upvoted 8 times

  **pinimichele01** Most Recent  6 months, 1 week ago

**Selected Answer: B**

Agree with guilhermebutzke

   upvoted 1 times

  **fitri001** 6 months, 2 weeks ago

**Selected Answer: B**


Scalability: Uploading audio files to Cloud Storage provides a scalable and reliable storage solution for your large dataset.  
Asynchronous Processing: The `speech:longrunningrecognize` API enables asynchronous transcription, allowing your code to proceed without waiting for each file to finish processing. This improves overall throughput.  
Managed Service: Cloud Functions are serverless functions that automatically scale to handle the workload. You don't need to manage servers or infrastructure.  
Natural Language API Integration: The Cloud Function can directly call the Natural Language API's `analyzeSentiment` method for sentiment analysis, streamlining the workflow.

   upvoted 2 times

  **fitri001** 6 months, 2 weeks ago

C & D: Local Processing: Iterating over local files and using the Speech-to-Text Python library might be suitable for small datasets. However, for a large number of audio files, local processing becomes slow and inefficient, especially for long audio files (5 minutes).  
C: Speech-to-Text API Limitation: The `speech:recognize` API is designed for short audio snippets (less than a minute) and might not be suitable for 5-minute audio files.

   upvoted 1 times

  **gscharly** 6 months, 3 weeks ago

**Selected Answer: B**

Agree with guilhermebutzke

   upvoted 1 times

  **ddogg** 9 months, 1 week ago

**Selected Answer: A**

A)  
Efficiency: Option A leverages the optimized and scalable infrastructure of Google Cloud Platform (GCP). Using the `speech:longrunningrecognize` API allows you to transcribe large audio files efficiently without overwhelming your local machine or network.

Cost-effectiveness: Paying for processing in Cloud Storage can be more cost-effective than performing it locally, especially for large datasets.

Ease of use: The Cloud Storage and Speech-to-Text APIs are well-documented and provide readily available libraries for easy integration.

Scalability: This approach scales easily as your dataset grows, as GCP can handle large workloads efficiently.

   upvoted 2 times

  **shadz10** 9 months, 3 weeks ago

**Selected Answer: A**

Re-considering as question states large dataset going with option A

   upvoted 1 times

  **shadz10** 9 months, 3 weeks ago



**Selected Answer: B**

I'm going with b and agree with BlehMaks - For your convenience, the Natural Language API can perform sentiment analysis directly on a file located in Cloud Storage, without the need to send the contents of the file in the body of your request.

Googles best practices try api first then auto ml then custom training.

<https://cloud.google.com/natural-language/docs/analyzing-sentiment>

   upvoted 1 times

  **b1a8fae** 9 months, 3 weeks ago

**Selected Answer: A**



A.

It must be longrunningrecognize -> no C.

No point speaking about Python files -> no D.

Final question being: NL analyzeSentiment or AutoML sentiment? I feel due to large dataset VertexAI AutoML is the way to go (can scale to large volumes of data)

   upvoted 1 times

  **b1a8fae** 9 months, 3 weeks ago

More info: what natural language is right for you? <https://cloud.google.com/natural-language?hl=en>

   upvoted 1 times

  **BlehMaks** 9 months, 3 weeks ago

**Selected Answer: B**

Vertex AI AutoML is overkill as the build-in NL API provides sentiment analysis.


   upvoted 4 times

  **36bdc1e** 9 months, 3 weeks ago

B

Because don't need to train model just use google api transcribe and sentiment analysis

   upvoted 2 times

  **pikachu007** 9 months, 3 weeks ago

**Selected Answer: A**

Efficient audio processing: speech:longrunningrecognize is specifically designed for handling large audio files, offering asynchronous processing and optimized performance.

Scalability: Cloud Storage and Vertex AI AutoML scale seamlessly to handle large volumes of data and model inferences.

Cost-effectiveness: Separating transcription and sentiment analysis allows for potential cost optimization by using different pricing models for each service.

   upvoted 2 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® are registered trademarks owned by CFA Institute.