UDACITY

Return to Classroom

DISCUSS ON STUDENT HUB

Capstone - Azure Machine Learning Engineer

REVIEW

CODE REVIEW

HISTORY

Meets Specifications

Congratulations. You have done it 🎉🎉

You have completed all the requirements of the `Capstone - Azure Machine Learning` project and earned a new milestone. 🏆🏆

Keep doing your best in any project you're implementing. 🔥🔥

All the best 👍🏽 👍🏽

Extra Resource

- Auto ML
- HyperParameter tuning using HyperDrive
- Parameter Sampling

- Parameter Sampling
- Early Termination Policy
- Create Datasets - Azure ML
- Deploy models with Azure Machine Learning

Project Setup and Style

The project should make use of a dataset that is not available in the azureml framework. The selected dataset should be uploaded and accessed inside the AzureML Studio. The dataset should be then used to train the models used by the student.

Note: The exact method of uploading and accessing the data is not important.

Already Passed and Meeting Requirements 💯

A README file is included in the project root and has:

- An overview of the project
- An overview of the dataset used
- An overview of the method used to get the data into your Azure ML Studio workspace.
- An overview of your AutoML experiment settings and configuration
- An overview of the types of parameters and their ranges used for the hyperparameter search
- An overview of the two models with the best parameters
- An overview of the deployed model and instructions on how to query the endpoint with a sample input
- A short overview of how to improve the project in the future
- ALL the screenshots required with a short description
- A link to the screencast video on YouTube (or a similar alternative streaming service)

You are encouraged to make your README document as informative and detailed as possible. To do this, you can use screenshots, block diagrams and charts.

Already Passed and Meeting Requirements 💯

The screencast should meet the following criteria:

- Screencast is 1-5 minutes in length
- Audio is clear and understandable
- Video is 1080P or higher with 16:9 aspect ratio

- Video is 1080P or higher with 16:9 aspect ratio
- text is readable

The screencast should demonstrate:

- A working model
- Demo of the deployed model
- Demo of a sample request sent to the endpoint and its response
- Demo of any additional feature of your model

Already Passed and Meeting Requirements 💯

AutoML Model

The project should include:

- AutoML settings (the settings you use are up to you)
- An AutoML config (The experiment configuration is up to you)

You are encouraged to provide details behind your reasoning for choosing the settings and experiment configuration

Already Passed and Meeting Requirements 💯

The submission contains a screenshot of the RunDetails widget that shows the progress of the training runs of the different experiments.

You are encouraged to provide details in the submitted Jupyter notebook about the performance of the different models on the primary metric of your experiment.

Already Passed and Meeting Requirements 💯

Your submitted Jupyter notebook contains details of the best model and documents the parameters of that model.

Already Passed and Meeting Requirements 💯

The submitted notebook contains code showing the best model being registered and includes a screenshot of the best model with its run id.

Already Passed and Meeting Requirements 💯

Hyperdrive Model

The project should use the following features of hyperdrive:

- Use one type of sampling method: grid sampling, random sampling or Bayesian sampling.
- Logs metrics during the training process
- Specify an early termination policy (not required in case of Bayesian sampling).

Already Passed and Meeting Requirements 💯

The project should defines a search space for at least 2 different hyperparameters to be tuned. The specific model is not important as long as a search is done over at least two different hyperparameters of the model. However, do not limit yourself to just two parameters, you are encouraged to

You are encouraged to provide documentation in the submitted Jupyter notebook of the different hyperparameters that were optimized and why they were chosen.

Already Passed and Meeting Requirements 💯

The submission contains a screenshot of the RunDetails widget that shows the progress of the training runs of the different experiments.

You are encouraged to provide details in the submitted Jupyter notebook about the effects of the different hyperparameters on the primary metric of your model.

Already Passed and Meeting Requirements 💯

The submission includes a screenshot of the best model with its run id and the different hyperparameters that were tuned. The submitted notebook also contains code showing the best model being registered.

Already Passed and Meeting Requirements 💯

Deploying the Model

Your project should contain the following:

- Model being registered
- Model being deployed
- A file containing the environment details

The submission contains a screenshot showing the model endpoint as active.

Great. I have seen that you have included the file containing the environment details -

27 lines (24 sloc) | 755 Bytes

```
# Conda environment specification. The dependencies defined in this file will
# be automatically provisioned for runs with userManagedDependencies=False.

# Details about the Conda environment file format:
# https://conda.io/docs/user-guide/tasks/manage-environments.html#create-env-file-manually

name: project_environment
dependencies:
  # The python interpreter version.
  # Currently Azure ML only supports 3.5.2 and later.
- python=3.6.2

- pip:
  - azureml-train-automl-runtime==1.25.0
  - inference-schema
  - azureml-interpret==1.25.0
  - azureml-defaults==1.25.0
- numpy>=1.16.0,<1.19.0
- pandas==0.25.1
- scikit-learn==0.22.1
- py-xgboost<=0.90
- fbprophet==0.5
- holidays==0.9.11
- psutil>=5.2.2,<6.0.0
channels:
- anaconda
- conda-forge
```

Well done 🎉

Your submission should contain code showing an inference request being sent to the deployed model.

Already Passed and Meeting Requirements 💯

DOWNLOAD PROJECT

RETURN TO PATH

Rate this review

START