

ESPECIFICAÇÕES DO PROJETO

Optimizing an ML Pipeline in Azure

Documentation

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| Explain the pipeline architecture. | The README contains an explanation of: |
| | The pipeline architecture, including data, hyperparameter tuning, and classification algorithm. The benefits of the chosen parameter sampler. The benefits of the chosen early stopping policy. |
| Compare a provided model with one generated by AutoML. | The README contains: |
| | One or more sentences describing the model and parameters generated by AutoML. Two or more sentences comparing the two models and their performance. |
| Explain and justify ways to improve models. | The README contains two or more sentences explaining potential improvements for a future experiment and why these improvements might improve the model. |

Training Pipeline and AutoML

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| Pass parameters to training scripts. | All specifiable parameters of the training script are specified in the hyperdrive config. |
| Use HyperDrive to automatically find optimal parameters. | A hyperdrive config is used and includes: |
| | A parameter samplerA policy for early stopping |
| Retrieve the best run using .get_best_run_by_primary_metric(). | <pre>.get_best_run_by_primary_metric() is used on the hyperdrive run to retrieve the best run.</pre> |
| Use the <i>RunDetails</i> widget to explore run metrics. | The hyperdrive run is passed to the RunDetails widget. |
| Create an AutoMLConfig for training. | The solution notebook includes an AutoML config, which contains the following parameters: |
| | task primary_metric experiment_timeout_minutes training_data label_column_name n_cross_validations |

Infrastructure

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| Create a compute cluster using the SDK. | A compute cluster is created using the Azure SDK and the ComputeTarget and AmlCompute objects. |
| Import data to a Dataset using the SDK. | A TabularDatasetFactory is used to create a dataset from the provided link. |
| Clean up deployed resources. | The delete method of the AmlCompute object is used to remove the cluster following training. |
| | OR |
| | An image of the compute cluster being selected for deletion is included in the README. |

Sugestões para Fazer o Seu Projeto se Destacar!

- 1. Include a diagram of your pipeline architecture.
- 2. Export your model and run it in Cloud Shell.
- 3. Extend your AutoML config to include more parameters.
- 4. Have your code check for existing compute clusters before creating a new one.