

**Amazon Web Services** 

**MLOps with AWS** 

Masterclass



## Machine Learning

Operations with AWS

Day -13





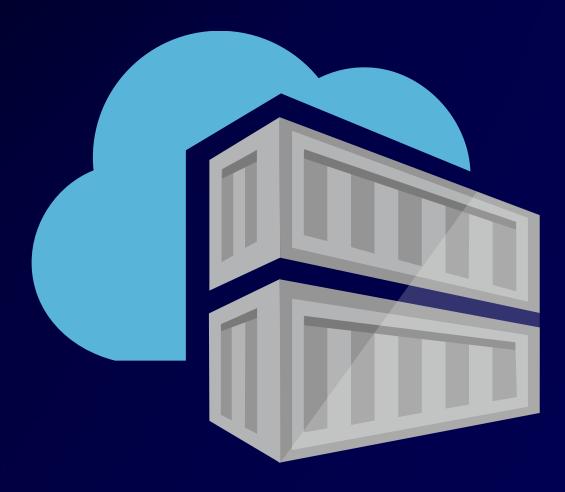
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## Sagemaker Container Processor



#### Sagemaker Container Processor

- SageMaker's Scikit-Learn Container is a pre-built environment provided by Amazon SageMaker that allows you to use the Scikit-Learn library for machine learning preprocessing tasks within the SageMaker ecosystem.
- It provides a convenient way to perform data preprocessing, feature engineering, and transformation steps on large datasets using Scikit-Learn's familiar APIs.

### Configuring the notebook

```
import boto3
import sagemaker
from sagemaker import get_execution_role
region = boto3.session.Session().region_name
role = get_execution_role()
```

#### Sagemaker SKLearn Processor

```
from sagemaker.sklearn.processing import SKLearnProcessor
sklearn_processor = SKLearnProcessor(framework_version='0.20.0',
 role=role,
 instance_type='ml.m5.xlarge',
 instance_count=1)
```

# Create the preprocessing code in preprocessing.py



#### Run the container

```
from sagemaker.processing import ProcessingInput,
ProcessingOutput
sklearn_processor.run(code='preprocessing.py',
     inputs=[ProcessingInput(
     source=input_data,
 destination='/opt/ml/processing/input')],
     outputs=[ProcessingOutput(output_name='train_data',
     source='/opt/ml/processing/train',
     destination='s3://slytherins-test/'),
 ProcessingOutput(output_name='test_data',
    source='/opt/ml/processing/test',
    destination='s3://slytherins-test/')],
    arguments=['--train-test-split-ratio', '0.1']
```

#### Getting information about the job

```
preprocessing_job_description = sklearn_processor.jobs[-1].describe()
output_config = preprocessing_job_description['ProcessingOutputConfig']
```



## Thank you

