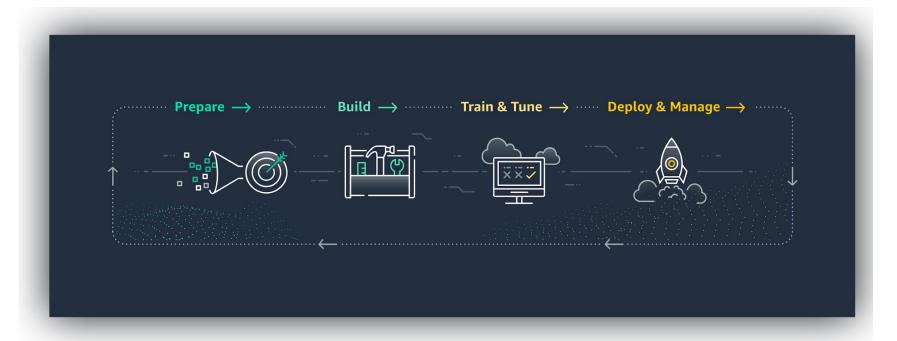
# Introduction to Amazon SageMaker



### Amazon SageMaker





### Prepare →

SageMaker Ground Truth Label training data for machine learning

SageMaker Data Wrangler NEW Aggregate and prepare data for machine learning

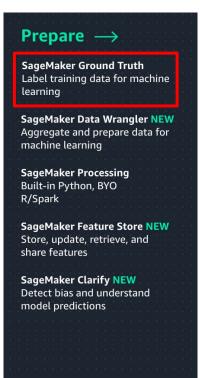
**SageMaker Processing** Built-in Python, BYO R/Spark

SageMaker Feature Store NEW Store, update, retrieve, and share features

SageMaker Clarify NEW
Detect bias and understand
model predictions











### Prepare $\rightarrow$

SageMaker Ground Truth
Label training data for machine
learning

SageMaker Data Wrangler NEW Aggregate and prepare data for machine learning

**SageMaker Processing** Built-in Python, BYO R/Spark

SageMaker Feature Store NEW Store, update, retrieve, and share features

SageMaker Clarify NEW
Detect bias and understand
model predictions

#### Build $\rightarrow$

SageMaker Studio Notebooks
Jupyter notebooks with elastic
compute and sharing

**Built-in and Bring-your-own Algorithms**Dozens of optimized algorithms or bring your own

#### Local Mode

Test and prototype on your local machine

SageMaker Autopilot
Automatically create machine
learning models with full visibility

SageMaker JumpStart NEW
Pre-built solutions for common
use cases

nalytics dhya



### Prepare $\longrightarrow$

SageMaker Ground Truth
Label training data for machine
learning

SageMaker Data Wrangler NEW Aggregate and prepare data for machine learning

**SageMaker Processing** Built-in Python, BYO R/Spark

SageMaker Feature Store NEW Store, update, retrieve, and share features

SageMaker Clarify NEW
Detect bias and understand
model predictions

#### Build $\rightarrow$

SageMaker Studio Notebooks
Jupyter notebooks with elastic
compute and sharing

**Built-in and Bring-your-own Algorithms**Dozens of optimized algorithms or bring
your own

#### Local Mode

Test and prototype on your local machine

**SageMaker Autopilot**Automatically create machine learning models with full visibility

SageMaker JumpStart NEW
Pre-built solutions for common
use cases

nalytics dhya





SageMaker Ground Truth
Label training data for machine
learning

SageMaker Data Wrangler NEW Aggregate and prepare data for machine learning

**SageMaker Processing** Built-in Python, BYO R/Spark

SageMaker Feature Store NEW Store, update, retrieve, and share features

SageMaker Clarify NEW
Detect bias and understand
model predictions

#### Build $\rightarrow$

SageMaker Studio Notebooks
Jupyter notebooks with elastic
compute and sharing

**Built-in and Bring-your-own Algorithms**Dozens of optimized algorithms or bring your own

#### Local Mode

Test and prototype on your local machine

SageMaker Autopilot
Automatically create machine
learning models with full visibility

SageMaker JumpStart NEW
Pre-built solutions for common
use cases





#### Prepare $\rightarrow$

SageMaker Ground Truth
Label training data for machine
learning

SageMaker Data Wrangler NEW Aggregate and prepare data for machine learning

**SageMaker Processing** Built-in Python, BYO R/Spark

SageMaker Feature Store NEW Store, update, retrieve, and share features

SageMaker Clarify NEW
Detect bias and understand
model predictions

#### Build $\rightarrow$

SageMaker Studio Notebooks
Jupyter notebooks with elastic
compute and sharing

**Built-in and Bring-your-own Algorithms**Dozens of optimized algorithms or bring
your own

**Local Mode**Test and prototype on your local machine

SageMaker Autopilot
Automatically create machine
learning models with full visibility

SageMaker JumpStart NEW
Pre-built solutions for common
use cases

#### Train & tune $\rightarrow$

One-click Training
Distributed infrastructure
management

**SageMaker Experiments**Capture, organize, and compare every step

**Automatic Model Tuning** Hyperparameter optimization

**Distributed Training Libraries NEW**Training for large datasets
and models

SageMaker Debugger NEW
Debug and profile
training runs

Managed Spot Training Reduce training cost by 90%



#### Prepare $\rightarrow$

SageMaker Ground Truth
Label training data for machine
learning

SageMaker Data Wrangler NEW Aggregate and prepare data for machine learning

**SageMaker Processing** Built-in Python, BYO R/Spark

SageMaker Feature Store NEW Store, update, retrieve, and share features

SageMaker Clarify NEW
Detect bias and understand
model predictions

#### Build $\rightarrow$

**SageMaker Studio Notebooks**Jupyter notebooks with elastic compute and sharing

**Built-in and Bring-your-own Algorithms**Dozens of optimized algorithms or bring
your own

**Local Mode**Test and prototype on your local machine

SageMaker Autopilot Automatically create machine learning models with full visibility

SageMaker JumpStart NEW
Pre-built solutions for common
use cases

#### Train & tune $\rightarrow$

**One-click Training**Distributed infrastructure management

SageMaker Experiments
Capture, organize, and compare
every step

Automatic Model Tuning Hyperparameter optimization

**Distributed Training Libraries NEW**Training for large datasets
and models

SageMaker Debugger NEW
Debug and profile
training runs

Managed Spot Training Reduce training cost by 90%

#### Deploy & manage →

**One-click Deployment**Fully managed, ultra low latency, high throughput

**Kubernetes & Kubeflow Integration**Simplify Kubernetes-based machine learning

Multi-Model Endpoints
Reduce cost by hosting multiple
models per instance

**SageMaker Model Monitor** Maintain accuracy of deployed models

SageMaker Edge Manager NEW Manage and monitor models on edge devices

SageMaker Pipelines NEW
Workflow orchestration and
automation



### Amazon SageMaker Console

console.aws.amazon.com/sagemaker/



- Supports leading frameworks
  - TensorFlow
  - PyTorch

MXNet
Scikit-Learn
Apache Spark



- Supports leading frameworks
  - TensorFlow
  - PyTorch
- MXNet
  Scikit-Learn
  Apache Spark
- Languages supported
  - Python
  - R



### Amazon SageMaker: Available Algorithms

<u>Use Amazon SageMaker Built-in Algorithms - Amazon SageMaker</u>



### Amazon SageMaker: Pricing Details

<u>Amazon SageMaker Pricing – Amazon Web Services (AWS)</u>





