

## Preparing data at scale with Amazon SageMaker Studio Notebooks

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### Agenda

Introduction to SageMaker Studio

### Introduction to Amazon EMR and AWS Glue Interactive Sessions

Demo



## Amazon SageMaker Studio

#### FULLY INTEGRATED DEVELOPMENT ENVIRONMENT (IDE) FOR MACHINE LEARNING

SAGEMAKER STUDIO								
Prepare	Store	Detect	Build with	Train	Tune	Deploy in production	Explain	Manage
data	features	bias	notebooks	models	parameters		predictions	and monitor



### **Amazon EMR**

#### EASILY RUN SPARK, HIVE, PRESTO, HBASE, FLINK, AND MORE BIG DATA APPLICATIONS ON AWS



Updated with latest open source frameworks within 30 days Support for popular OSS like Flink, Hudi

Spark workloads run up to **3x faster** compared to other open-source tools

Up to **50–80% reduction** in costs with EC2 Spot and reserved instances **per-second billing** for flexibility Process data in Amazon S3 securely with high performance using the EMR File System (EMFRS) connector

Scale compute and storage independent of each other

**Fully managed,** no cluster setup, node provisioning, or cluster tuning

Vertical and horizontal auto scaling to suit workload demands



### **AWS Glue interactive sessions with Studio**

NEXT-GENERATION INTERACTIVE DATA EXPLORATION AND JOB DEVELOPMENT

Use the **built-in AWS Glue kernels** in SageMaker Studio



Time to first Spark query: ~30 seconds

**On-demand**, highly scalable, and shuts off when idle

No up-front configuration needed

**Dedicated resources** for no noisy neighbors





# Thank you!

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