

Amazon SageMaker Studio Deep Dive

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The machine learning workflow is iterative and complex

Prepare

Build

Train & Tune

Deploy & Manage



```
101011010
010101010
000011110
```

Collect and
prepare
training data



Choose or build an
ML algorithm



Set up and manage
environments
for training



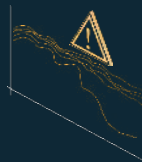
Train, debug, and
tune models



Manage training runs



Deploy
model in
production



Monitor
models



Validate
predictions



Scale and manage
the production
environment

Amazon SageMaker helps you build, train, and deploy models

Prepare

Build

Train & Tune

Deploy & Manage

Web-based IDE for machine learning

Fully managed data processing jobs and data labeling workflows

```
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```

Collect and prepare training data

One-click collaborative notebooks and built-in, high performance algorithms and models



Choose or build an ML algorithm

One-click training



Set up and manage environments for training

Debugging and optimization



Train, debug, and tune models

Visually track and compare experiments



Manage training runs

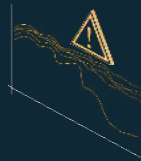
Automatically build and train models

One-click deployment and autoscaling



Deploy model in production

Automatically spot concept drift



Monitor models

Add human review of predictions



Validate predictions

Fully managed with auto-scaling for 75% less cost



Scale and manage the production environment

Modular service and APIs, from experimentation to production

Amazon SageMaker Studio (preview)

Fully integrated development environment (IDE) for machine learning



Collaboration at
scale

Share notebooks
without tracking code
dependencies



Easy experiment
management

Organize, track, and compare
thousands of experiments



Automatic model
generation

Get accurate models with full
visibility & control without
writing code



Higher quality ML
models

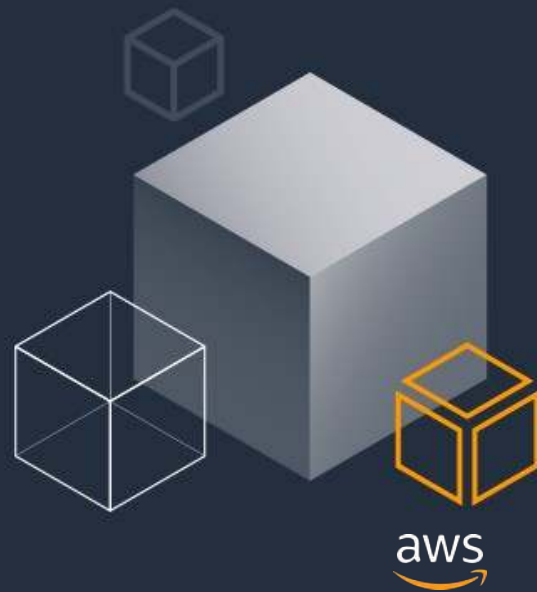
Automatically debug errors,
monitor models, & maintain
high quality



Increased
productivity

Code, build, train, deploy, &
monitor in a unified visual
interface

Demo



Getting started

<http://aws.amazon.com/free>

<https://aws.amazon.com/sagemaker>

<https://github.com/aws/sagemaker-python-sdk>

<https://github.com/aws-labs/amazon-sagemaker-examples>

<https://youtube.com/juliensimonfr>

<https://medium.com/@julsimon>