

# Automated Machine Learning on AWS with DataRobot

## Build and deploy highly accurate models in less time

DataRobot is an AWS Advanced technology partner with the AWS Machine Learning competency.



DataRobot

aws  competency

## Industry Trends

Organizations across industries look to technology, not only as a way to run their operations more smoothly, but as a way to gain competitive advantage. Artificial Intelligence (AI) and machine learning have transformed the businesses that are aggressively adopting these technologies, allowing them to systematically solve business problems faster and more effectively.

## Challenges

While machine learning initiatives can provide highly accurate predictive models, they traditionally require data scientists – who are expensive and require extensive training – to develop, test, and interpret these models. Additionally, because of the shortage of data scientists, many of them lack a basic understanding of the business, which limits their effectiveness. For organizations within highly regulated industries, such as finance or insurance, machine learning models must adhere to strict compliance standards, which can sometimes deter organizations from creating the models in the first place. Finally, because of the complexity of converting a machine learning model written in R or Python into code that works in production systems, many models are never deployed, meaning all the effort in development is wasted.

## Solution Overview

DataRobot automates much of the data science process, streamlining the development and deployment of predictive models while providing the guardrails needed to improve their accuracy. The data these models produce is then easily distributed to your team through downloadable diagnostic charts, data, and documentation. DataRobot has implemented the same advanced techniques that skilled data scientists use, and incorporates hundreds of open source machine learning algorithms, along with the modeling blueprints needed to help optimize the model. DataRobot delivers the information and transparency that data scientists need in order to analyze why a certain model performs the way it does, and the reporting needed to explain the model to management or regulators.

Because machine learning has applications in just about any industry, the DataRobot solution addresses a wide spectrum of use cases. Whether you're a bank trying to reduce credit fraud, a hospital attempting to improve patient care, or a telecommunications provider trying to optimize bandwidth, DataRobot can help you achieve your business initiatives by delivering a fast path to efficient machine learning models.

DataRobot leverages the computational power of the Amazon Web Services (AWS) Cloud for its flexible, scalable, and secure environment, enabling you to build and deploy highly accurate machine learning models in a fraction of the time. DataRobot leverages several key AWS services including Amazon Simple Storage Service (Amazon S3), Amazon Compute Cloud (Amazon EC2), Amazon EC2 Container Registry (Amazon ECR), AWS Elastic Load Balancing, and more, to deliver a scalable machine learning environment.

## Customer Ready Solutions

Discover scalable solutions that help you achieve your business needs through a combination of AWS services and APN Partners that have attained AWS Competency designations. Based on architectures validated by AWS to accelerate your cloud transformation, you can deploy solutions quickly with AWS Quick Starts and optional Jumpstart consulting offers provided by APN Partners. [Visit here for more information.](#)

## Transform Machine Learning Through Automation

DataRobot brings simplicity to AI and machine learning. The automated machine learning platform enables users of any skill level to build and deploy highly accurate machine learning models faster and more easily than with traditional methods.

To take advantage of DataRobot, you simply:

1

Ingest your data.

2

Select the target variable (what you want to predict).

3

Build 100s of models in one click.

4

Explore the top models and get insights into performance.

5

Deploy the best model and make predictions.

## Benefits

DataRobot makes it possible for users of any skill level to derive incredibly valuable machine learning insights.



### Ease-of-Use

Intuitive web-based interface for users of any skill level



### Enterprise-Grade Security

Hardened platform with security and safeguards



### Community

Constantly evolving library of best-in-class algorithms



### Speed & Efficiency

Scalable, high availability modeling engine



### Accuracy

Models are fine-tuned for your specific dataset



### Rapid Deployment

Quickly operationalize models via REST API or export

## Getting Started

Implementing DataRobot on AWS is quick and intuitive. There is no hardware installation required and DataRobot takes care of resource allocation (CPU, memory, GPU, etc.) for you with its DataRobot Software-as-a-Service (SaaS) solution. Instantly access and scale the resources you require for DataRobot to address your machine learning challenges.

Get started with the DataRobot on AWS [here](#)



About AWS: For 10 years, Amazon Web Services has been the world's most comprehensive and broadly adopted cloud platform. AWS offers over 70 services for compute, storage, databases, analytics, mobile, Internet of Things (IoT) and enterprise applications from 49 Availability Zones (AZs) across 18 geographic regions in the United States, Canada, Europe, Asia, and Australia. AWS services are trusted by more than a million active customers around the world – including the fastest growing startups, largest enterprises, and leading government agencies – to power their infrastructure, make them more agile, and lower costs. To learn more about AWS, visit <http://aws.amazon.com>.

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