Automated machine learning on AWS with DataRobot

Build and deploy highly accurate machine learning models, faster

DataRobot is an APN Advanced Technology Partner and AWS Financial Services and Machine Learning Competency holder.

Industry trends & challenges

The opportunity to use machine learning in Capital Markets is massive. Buyer-side data science teams in markets can use machine learning to backtest and evaluate thousands of potential trading strategies. Seller-side companies can predict customer trading behavior, identify the perfect audience for a research report, rank investors by possible interest in an IPO, and more. Even with the potential gains organizations may realize from leveraging machine learning, they often shy away due to a lack of highly skilled data scientists.

The DataRobot solution

DataRobot has implemented the advanced techniques that skilled data scientists use, in a more consumable way. It can automate much of the data science process, streamlining the development and deployment of machine learning models on Amazon Web Services (AWS) while providing the guardrails you need to improve the accuracy. The data these models produce can be easily interpreted by your team through diagnostic charts, data, and documentation. This solution 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 your business analysts and data scientists need in order to analyze why a certain model performs the way it does, and the reporting you need to explain the model to management or regulators.

Benefits

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

- **Transparency**
  Models are developed and validated for transparency and auditability.

- **Collaboration**
  Easily share projects, documentation, and validation results between teams to minimize re-work.

- **Proof**
  Included risk management capabilities help you comply with financial sector regulations.

- **Flexibility**
  Templates and processes (i.e., submission, review, and governance) match your organizational needs.
Solution overview

**DataRobot**

DataRobot, a global data science and machine learning company, helps banking institutions around the world leverage the power of machine learning. With an easy-to-use interface and platform, users of all skill levels can produce accurate machine learning models in a fraction of the time it would take using conventional tools and methods. To leverage innovative techniques, DataRobot uses open source tools like Apache Spark, H2O, Python, R, TensorFlow, Vowpal Wabbit, and XGBoost.

**DataRobot on AWS**

DataRobot leverages the computational power of AWS 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.

How it works

The DataRobot automated machine learning platform on AWS can transform your business across different products, functions, and regions. With DataRobot, organizations like yours avoid the integration headaches of using many different “point” solutions in various parts of the business. For example, banks may use DataRobot’s automated machine learning to increase insights across business functions, including credit risk, fraud, marketing, and underwriting projects.

Getting started

DataRobot Cloud is available as a software as a service (SaaS) solution on AWS directly from DataRobot.

- **Contact AWS and DataRobot**
- **View the DataRobot offering on Solution Space**
- **Learn more about DataRobot on AWS**
- **View the whitepaper:** Drive Successful Business Outcomes From Data With AI