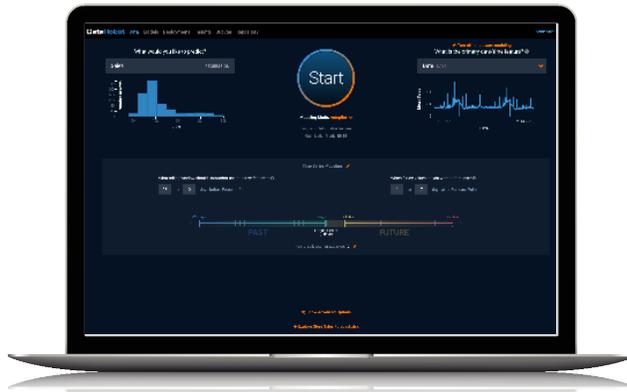# DataRobot Platform

DataRobot accelerates your AI success by putting the power of cutting-edge machine learning technology into the hands of the team you already have in place. The platform incorporates the knowledge, experience, and best practices of the world's leading data scientists, delivering unmatched levels of automation, accuracy, transparency, and collaboration to help your business transform into an AI-driven enterprise.

DataRobot offers an easy-to-use visual interface for both business users and experienced data scientists

AUTOMATION

With DataRobot you empower your existing team to build and deploy highly accurate machine learning models in a fraction of the time it takes using traditional data science methods – allowing your organization to scale data science capabilities quickly. Instead of spending weeks or months developing and testing a few hand-coded models, your current team can build hundreds of models and deploy the best performing model in hours.

COLLABORATION

Many organizations rely on a complex and diverse set of task-oriented tools that differ for technical and non-technical users. With DataRobot you get one unified platform designed for a range of users, fostering collaboration and ultimately building an AI culture across your organization. Build models and generate predictions with DataRobot on-premises or in the cloud, using your choice of an intuitive GUI or a powerful API.

TRANSPARENCY

DataRobot offers superior interpretability and explainability so you can easily understand how models were built as well as explain why a model made the prediction it did – confidently. Built-in interactive visualizations and automated model documentation help you understand which types of data impact a model the most, and provide deep insight into how individual values impact your business. No black boxes here.

ACCURACY

Automation and speed shouldn't come at the expense of quality. DataRobot uniquely delivers on all fronts, bringing world-class data science technology to companies with uncompromising results. DataRobot chooses the most appropriate machine learning algorithms, then automatically optimizes data pre-processing, feature engineering, and tuning parameters for each algorithm to create and rank highly accurate models. It then recommends the best model to deploy for your data and prediction target.

> What DataRobot was able to accomplish in the first hour was more thorough and accurate than models we had built over the prior month.
>
> — Dave Truzinzki,
> Chief Digital Officer
> Crest Financial

CREST FINANCIAL

> DataRobot not only empowered our data scientists by making them more productive, but is starting to democratize machine learning for our business analysts and data managers. It will be impactful to our organization and integral in advancing our overall AI strategy.
>
> — Anthony Randall,
> Digital Strategic Alliance Lead
> Monsanto

MONSANTO

DataRobot

Support for all types of business problems. DataRobot will analyze your training dataset and automatically recommend the optimal type of model: regression, classification, or time series.

Innovative open source algorithms. DataRobot uses the latest and most powerful open source machine learning libraries, including R, Python, scikit-learn, H2O, Tensor-Flow, Vowpal Wabbit, Spark ML, and XGBoost.

Automated model evaluation. DataRobot provides the tools and visualizations you need to explore and compare individual models. The built-in leaderboard helps you easily see which models perform best with your data.

Automated feature engineering. DataRobot prepares data automatically, performing operations like one-hot encoding, missing value imputation, text mining, and standardization to transform features for optimal results.

Time-aware forecasting. DataRobot can automate the development of sophisticated time series models that predict the future values of a data series based on its history and trend. The platform automatically detects stationarity and seasonality, and implements backtesting to achieve the highest possible accuracy.

Multiclass model support. DataRobot allows for classification on targets with up to 100 distinct values, offering real-time and batch support for uncovering the predictive class and showing its probability across all classes.

Built-in guardrails. With DataRobot, modeling projects follow a consistent methodology based on data science best practices. Novice users can't forget to perform a critical step, such as model validation.

Advanced machine learning techniques. DataRobot incorporates the techniques advanced data scientists use: boosting, bagging, random forests, kernel-based methods, generalized linear models, deep learning, and many others.

Unsupervised anomaly detection. Uncover anomalies in a dataset with DataRobot's unsupervised ensemble blend model, which can offer new insights, even in familiar datasets.

Manual tuning capabilities. DataRobot automates model tuning, but also supports manual tuning so you can tune and adjust machine learning algorithms for potentially better results.

Monotonicity constraints. Apply a forced directional relationship between features and the target based on business knowledge or industry requirements.

Built for the Enterprise

DataRobot is an enterprise-grade platform that delivers the advanced performance, scalability, security, and governance today's organizations need, without significant hardware requirements.

Flexible deployment options. DataRobot can be deployed on-premise, in the cloud via VPC using your choice of cloud hosting providers, or in a hybrid environment. DataRobot is also available as a managed cloud service, delivering the flexibility and speed necessary for any enterprise.

Scalable performance via parallel processing. DataRobot leverages modern distributed processing, running experiments in parallel to radically reduce the time it takes to explore, build and tune machine learning models.

Robust model management and governance. Monitor and manage all deployed models from a central portal, and re-train and replace models to ensure they remain accurate and consistent throughout ever-changing market conditions.

No more model deployment bottlenecks. DataRobot provides multiple options for deploying your chosen models, including native scoring, exportable prediction code, and prediction APIs for low-latency scoring.

Resource monitoring and reporting. DataRobot provides a view of platform usage across the organization, including which users and models are consuming computing power, enabling effective resource planning.

Integrates with Hadoop. DataRobot can be installed as a service on YARN in Hadoop clusters, and perform distributed model scoring on data in HDFS. DataRobot machine learning data objects and operations are visible to, and under the control of, Hadoop management processes and policies.

Works with enterprise data. No matter where your data resides – relational databases, Hadoop clusters, text files or other sources – DataRobot quickly and easily connects to your data source.

Supports security protocol support. DataRobot offers fine-grained role-based security, including two-factor authentication, and supports Kerberos and LDAP protocols. DataRobot meets the stringent requirements of the CIA's C2S cloud, and our managed cloud service is SOC 2 Type II certified.

Automated model compliance documentation. DataRobot can generate documentation describing exactly how a model works for faster compliance and quality reviews, ensuring you can get a model into production in a fraction of the time.

Editable rating tables. Customizable rating tables allow users to edit and manipulate the model coefficients according to their unique business rules, allowing for an optimal blend of machine learning and human experience.

Products
- Automated Machine Learning
- Automated Time Series

Deployment Options
- Managed AI Cloud
- On-Premise AI Cluster
- Private AI Cloud on Amazon Web Services, Google Cloud Platform, Microsoft Azure, and more
- Hybrid AI Cloud

Interface Options
- Graphical User Interface (GUI)
- Application Programming Interface (API)

Sample Industries
DataRobot has customers and use cases in a myriad of industries, including:

- Retail
- Manufacturing
- Banking
- Fintech
- Insurance
- Public Sector

- Healthcare
- Non-profit
- Sports
- Transportation
- Hospitality
- Energy

Contact Us

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