

AI for Citizen Data Scientists

Unlock the hidden insights in your data with Iris, a sophisticated, automated AI tool for domain experts and business users



Overview

Machine learning and AI are driving advances across business processes and vertical sectors, creating as much as \$15.4 trillion in economic value annually. Yet, successful AI implementations rely on scarce data science experts to implement complex AI machine learning tasks.

To address this gap, Iris automates data science, putting the power of advanced analytics into the hands of business users. Iris automates complex machine learning tasks so users can focus on implementing the insights uncovered in that analysis, business and process improvements, and cost and growth initiatives.

Automated Data Science

Iris automates critical data science workflow and pipeline functions so users can focus on choosing the best data to analyze and the insights that analysis reveals. Iris handles key AI steps that data scientists typically oversee:

- Labeled and unlabeled data ingestion, cleaning, and normalization
- Feature engineering and tuning to prepare data sets for analysis
- Algorithm selection and hyperparameter tuning

On top of automatically selecting the optimal machine learning algorithms, analyzing the data, and highlighting the most valuable insights, Iris leverages the visual power of topological data analysis (TDA) to reveal insights and hidden patterns in the data.

Using segmentation (unsupervised or goal-based) of large data sets, Iris performs typical machine learning tasks such as prediction, forecasting, and anomaly detection. This automation means users can simply address a particular question (supervised ML) or aim Iris at a data set and find previously unseen patterns in that data (unsupervised ML).

Features

Data cleaning and normalization

Data science workflows typically require large amounts of data cleaning and normalization. Iris automates this step so users can get value and insights faster.

Automated Feature Engineering

Iris automatically generates and performs feature selection to rapidly identify data attributes that contain signals worthy of analysis. Iris creates newly derived attributes to accelerate prediction and segmentation, removing the reliance on data scientist resources so teams can focus on business insights and process improvement. For advanced users, Iris supports the flexibility to create new models by creating new features, custom feature sets, and other parameters.

Automated Model Creation and Evaluation

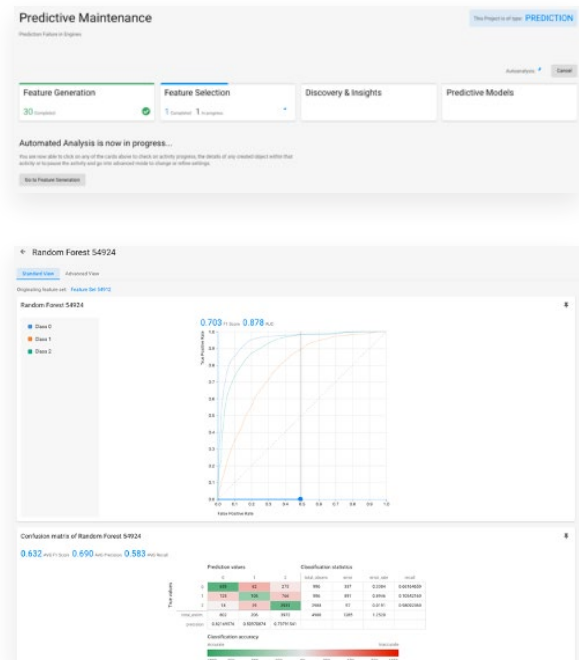
Iris automates machine learning model creation and training and evaluates the results, returning the most accurate models. It incorporates various predictive techniques, ranging from the simplest regression models to random forest and gradient boosted models. This means business users receive the best predictions and results without needing to understand which algorithm is best suited for a particular data set or problem. Iris also generates and presents the top-scoring topological models, automatically finding groups and describing the group's critical differentiators within each network, so users can easily see similarities, outliers, and anomalies.

Discovery and Insights

Iris explains model decisions at an atomic level so you can understand and trust the model's predictions and present the outcomes to decision makers. Iris facilitates rapid understanding of segments, anomalies, and hotspots in a topological model supported by these explainers. With robust TDA capabilities that extract information from large volumes of high-dimensional data, Iris reduces the possibility of missing critical insights as it can reveal hidden patterns.

Iris Benefits

- Get AI insights from enterprise data through predictive models without dependency on data scientists or machine learning experts
- Automate data science pipelines from feature engineering to predictive model creation with single click
- Detect patterns and uncover actionable insights in complex datasets via visual results
- Empower domain experts



About SymphonyAI Accelerate

SymphonyAI Accelerate is the developer of EurekaAI, the world's most advanced AI platform, and the incubation arm of SymphonyAI, the leading enterprise AI company for the digital transformation of the enterprise. www.symphonyai.com/about/accelerate