

Feature	Description	Click	Code
Data & Platform Accessibility			
Ease of use	Perform data wrangling, transformation, enriching, profiling, structuring, exploration, and more	Y	Y
Unified platform	A unified platform that executes end to end machine learning	Y	Y
Visual composition framework	A visual composition framework that enables the interactive design of experiment flows by composing sets of building blocks and saving them in libraries for later reuse.	Y	Y
Enterprise application access	Connectors to enterprise applications and data sources both in the cloud and on-prem including MSSQL, PostgreSQL, MongoDB, Google Cloud Storage buckets, Amazon S3 buckets etc. Custom connectors for data lakes such as Hadoop and other NoSql databases are added and supported when needed.	Y	Y
Basic to advanced ELT	Extract, load and transform data. discover source content and use various methods to cleanse data, impute missing values, detect outliers and more.		Y
Hybrid data sources	Access data stored in cloud or On-Prem	Y	Y
Data Preparation			
Dataset partitioning	Random sampling (system automatically uses a sampling strategy based on the data) and automatic sample size determination	Y	Y
	Specifically use other data sampling strategies like stratified random, cluster, bootstrapping and more		Y
Binning and smoothing	Use various sorts of aggregation and smoothing		Y
Filter and search	Look up and exclude data elements and exclude irrelevant data from further processing	Y	Y
Machine learning and algorithm data preparation	mIOS employs ML to recommend actions to augment and accelerate data preparation	Y	
Data Exploration & Visualization			
Univariate and bivariate statistics	Standard statistical functions that automatically generate descriptive statistics on data	Y	Y
Statistical significance testing	Other statistical analysis such as chi-squared statistics, confidence intervals, A/B testing, T-tests, F-tests, Z-tests, and more		Y
Data visualizations	Full range of standard and advanced visualizations including table and bar, maps, candlestick, motion charts and more	Y	Y

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Interactive dashboards and charts	Interactive data exploration with ability to perform analytical tasks by solely interacting with visual images	Y	Y
Clustering and self-organizing maps	Select a combination of features for clustering in mIOS using automated techniques. Use specific techniques such as hierarchical clustering, expectation maximization, K-means and variants of self-organizing maps.	Y	Y
Automation & Augmentation			
Data preprocessing	Automation for data pre-processing, including data cleaning, normalization, standardization and more	Y	Y
Feature learning	Automated feature learning	Y	Y
Dimensionality reduction and feature selection	Automatic feature extraction and selection algorithms and dimensionality reduction techniques like principal component analysis (PCA) and singular value decompositions (SVDs) and more to reduce resources needed to describe a large set of data	Y	Y
Feature generation	Generate new columns with arbitrary expressions. Use automatic approaches for generating new features from existing ones	Y	Y
Algorithm selection	Automatically identify and select appropriate algorithms, based on the desired business problem, feature and available data.	Y	Y
Model tuning	Automated capability to train a model and select the optimal hyperparameter values	Y	Y
Model deployment and monitoring	Model factory functionality to automate building ML pipelines, including model training, governance, deployment, monitoring and managing models in production	Y	Y
Model swapping	Swap models with no interference to production models	Y	Y
Model documentation	Automated and interactive model documentation	Y	Y
Code generation	Auto generated python code that can be customized	Y	Y
Augmented data science and machine learning	Automated machine learning and augmented analytics	Y	Y
User Interface			
Ease of use and learning curve	Users other than data scientists can also use mIOS capabilities without formal training	Y	Y
Citizen data science	Interface specifically tailored to citizen data scientists such as business analysts and domain experts without programming skills	Y	

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Developer focused data science	Interface specifically tailored to developers and software engineers incorporating data science and machine learning into their applications and systems	Y	Y
Documentation	Videos and written tutorials covering most of the available functionality. Users can access extensive online information such as "how to" guides.	Y	Y
User community	Online community open to all product users for sharing experiences and answering questions from peers. Braintoy actively supports the user community by answering questions, providing sample content, recommending best practices and sharing relevant product-related information.	Y	Y
Wizards and contextual aids	Wizards and contextual aids to help users with specific steps and accelerate workflows	Y	Y
Machine Learning			
Classification and regression	Classification and/or regression models on Tabular, NLP, Times Series and Computer Vision data	Y	Y
Deep learning	Various deep learning framework from TensorFlow to Pytorch	Y	Y
Import or call other models	Import or call custom models via PMML or REST API's		Y
Measures of fit	A range of model evaluation metrics, including mean squared error (MSE), root mean square (RMS) and mean absolute Error (MAE), receiver operating characteristic curve (ROC) and more	Y	Y
Flexibility, Extensibility and Openness			
Python	Python	Y	Y
Popular libraries, third party libraries and frameworks	Supports third party, popular libraries and frameworks like scikit learn, TensorFlow, Pytorch and more	Y	Y
Code visibility and transparency	Customize generated python codes	Y	Y
Cloud and on-prem	Deploy anywhere, either in the cloud or on-prem	Y	Y
Model Explainability			
Explainability	Analyze scored data with visuals and comments to explain data and why the model is behaving in a certain way	Y	Y
Project and Model Management			

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Compliance and auditing	Ensure compliance and audit of models (i.e., full transparency on model lineage, model genesis, user interactions and data being used)	Y	Y
Object reuse	Reuse models, scripts, and workflows	Y	Y
Multi-user capabilities	Supports team of any size. Analysts share models, libraries, projects, algorithms, recipes and more in a secured environment. There is built in security to restrict access by groups and users to specific content.	Y	Y
Audit and logs	Audit trails, security logs and monitoring	Y	Y
Traceability	Support model traceability, versioning and lineage	Y	Y
Governance	Governance of model access and use. Workflow for model review and approvals	Y	Y
Collaboration			
Collaboration across all modeling steps for distributed teams	Collaboration across all modeling steps for distributed teams.	Y	Y
Collaboration between data scientists and business users	Facilitate collaboration between data scientists and less technically sophisticated business users to maximize the value of data scientists to the organization	Y	Y
Transparency of process and lineage	Track versions, iterations and process documentation	Y	Y