



HyperSense

AI Studio Overview Guide

What is HyperSense AI Studio?

It is no-code data science environment with AI automation capabilities to build and manage AI models. With HyperSense AI Studio, enterprises can:

- ✦ Redefine Enterprise AI
- ✦ Build, test, deploy, & operationalize AI models in minutes
- ✦ Democratize and widen AI across the organization

It can be deployed on premise, in private cloud and public cloud to complement your IT architecture, based on your enterprise's IT landscape.



Overview

Democratize data science for anyone in the organization

Rapid digitization is changing the data landscape across industries. It has led to a massive explosion of data volumes. To derive meaningful insights from data, many enterprises have accelerated AI adoption across their businesses. According to Gartner, 75% of organizations will shift from piloting to operationalizing AI by the end of 2024. Also, 50% of enterprises will devise AI orchestration platforms to operationalize AI.

AI as a technology has come a long way crossing the chasm from innovators and early adopters to the early majority. But only 31% of matured organizations have realized the value of AI projects. Currently, enterprises are struggling to extract value from AI due to a lack of contextualization to their business, and lack of collaboration amongst domain experts, data scientists, data engineers, and the likes. One of the biggest factors that hinders AI adoption across the organization is the lack of skillsets and expertise due to

complexities in connecting data, tools, and technologies with the domain knowledge, and the longer time taken by data science projects. Other prevalent issues include legacy infrastructure, data quality, and interpretability due to the black-box nature of ML models.

What organizations need is an end-to-end automated machine learning data science environment to drive AI at the scale and help enterprises in the different stages of their AI journey.

HyperSense AI Studio enables any enterprise user to build and operationalize AI successfully using automated machine learning. It increases the efficiency of data scientists allowing them to focus on higher-value tasks. It automates every step of the data science lifecycle including, feature engineering, algorithm selection, and hyper-parameter tuning.

Features



Automated ML

HyperSense AI Studio uses automated machine learning to automate time-consuming and iterative tasks of machine learning model development. It allows data scientists and experts to build ML models with higher scale, productivity, and efficiency while sustaining the model quality. It accelerates the time to get production-ready models with greater ease and efficiency. It also reduces human errors mainly because of manual measures in ML models. It also makes data science accessible to all, enabling both trained and non-trained resources to rapidly build accurate and robust models, thus fostering a decentralized process.



Feature Store

The quality of the machine learning model is not only based on code but also on the features used for running the model. Around 80% of data scientists' time goes into creating, training, and testing data. HyperSense AI Studio comes built-in with a feature store that allows features to be registered, discovered, and used as a part of an ML pipeline. It allows reusing features instead of rebuilding again from scratch for different models driving AI at scale.

FEATURES



Guided Analytics

HyperSense AI Studio is built with guided analytics capabilities, provides users with the ability to build applications with the appropriate levels of automation and human interaction at any stage of the data science cycle based on task and business user requirements. It gives alerts and recommendations to users while creating a pipeline. It reduces complexity and iterations. These workflows are not a black box, so what happens at each stage can be surfaced to the user in detail, including the results.



Composable Architecture

As many enterprises have started their AI journey and are at different stages of maturity, they require a module that can leverage their existing components in an organization while choosing a specific module suitable to their business needs. HyperSense AI Studio is a highly composable data science studio that allows them to integrate with the existing assets in the organization. It is integrated using various options such as APIs, files, databases, and streaming to achieve modularity and plug-and-play capabilities.



Visual Analytics

Visual Analytics combined with HyperSense AI Studio's automated ML capabilities provides users the visibility into how the AI system arrives at a decision and how the decision can be improved. Due to the black-box nature of AI algorithms, sometimes the decisions made can be biased. Visual analytics can allay these doubts by providing a transparent picture of the decision process. It improves the efficiency of the AI projects and helps to create ML pipelines quickly.



MLOps

HyperSense AI Studio provides MLOps capabilities that leverage automation to monitor, deploy and govern operations to manage machine learning lifecycle to get better business results. With MLOps, models can be easily deployed into the production environments. It provides constant monitoring and production diagnostics to improve the performance of existing models. It also establishes an AI Trust and Governance framework that helps to maintain the governance process for AI projects across the entire organization.

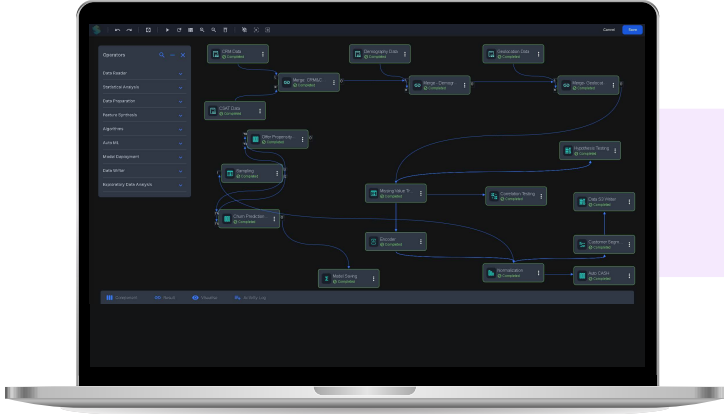


Multiple Deployment Options

HyperSense AI Studio supports multiple deployment environments based on business requirements and priorities. The deployment options are:

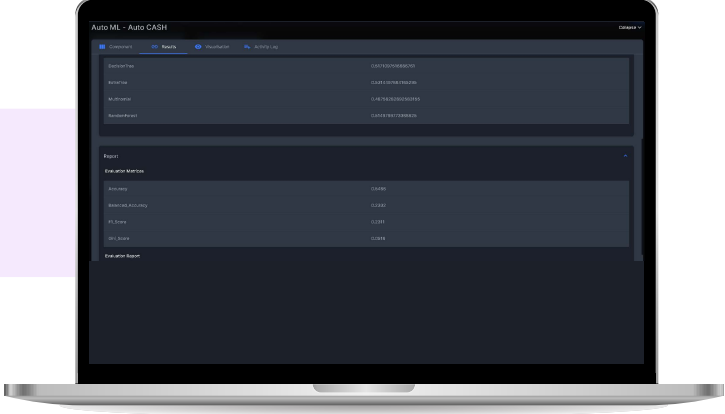
- o On-premises
- o Cloud
- o Hybrid

Advantages



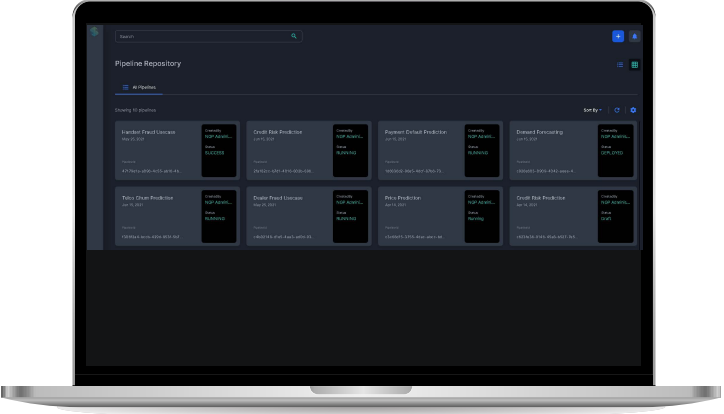
Create ML pipelines faster

By using 100+ operators built for various operations required in the ML life cycle.



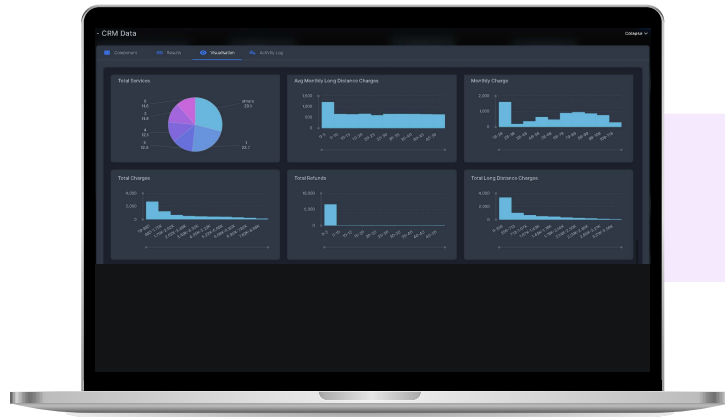
Iterate 100s of models and scale

Through automated Machine Learning operators to select the best algorithm for your data.



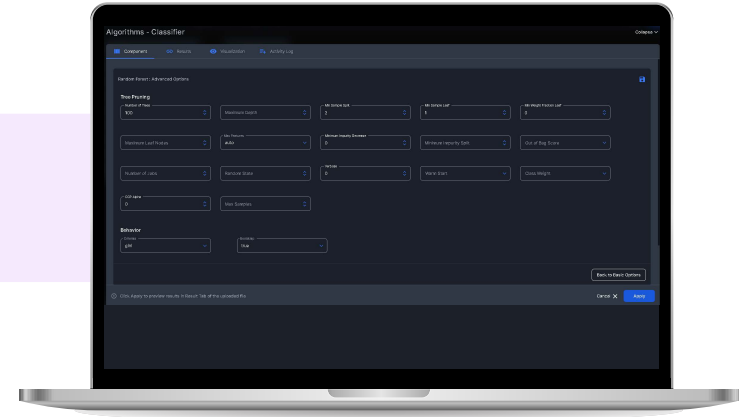
Run faster AI experiments

With pre-built telco accelerators and use case templates that can be customized to your needs.



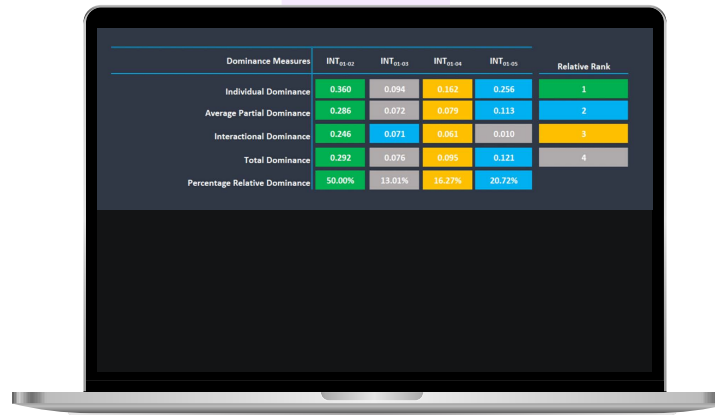
Quickly learn from data

Using the in-built visual analytics for generating insights on the go.



Perform complex operations with ease

By leveraging the power of distributed computing with 9x the speed of traditional computing.



Build transparent and trustworthy models

By leveraging explainable AI to understand how algorithms work and how to use them in your business.

Benefits



Accelerate AI Adoption

HyperSense AI Studio is an automated machine learning environment to drive AI at scale. It provides pre-configured use case templates to accelerate adoption and quick start AI experiments. It lets users explore and build use cases in a fail-fast manner. It also promotes reusability by providing users with access to extensive use cases from the marketplace.

- o Build and fail fast to explore new use cases quickly
- o Pre-built templates accelerate the adoption rate



Ensure Transparency

With Explainable AI capabilities, HyperSense AI Studio eliminates bias due to costly errors and ensures transparency in prediction, thereby improving model performance and build user trust through AI trust and governance framework. It enables organizations to build trust and confidence when putting AI models into production. It also improves accuracy and fairness when interpreting the models and algorithms.

- o Ensures transparency
- o Better interpretation and tuning of model output



Democratize AI

It is an end-to-end data science studio that democratizes AI across the entire data science cycle to build, test, and deploy complex AI models. Its unique no-code characteristic broadens AI/ML and data science avenues to anyone in the organization, regardless of their skillsets.

- o Empowers business users to become data scientists
- o Align AI initiatives to business objectives better



Increase Efficiency

AI studio enables users and data scientists to build their models more efficiently by allowing them to extend their custom code or external code. Leveraging HyperSense AI studio automated best practices, extended with custom or external code allows users and data scientists to efficiently build new ML pipelines and models, train and share them, then deploy them into the production environment quickly.

- o On-board custom code and existing models seamlessly
- o Faster deployment into the production environment



AI Studio Differentiators

01

Quick proof of value through pre-configured industry focus use cases.

02

Supports multiple deployment options such as on-premises, cloud, and hybrid based on business priorities.

03

Allows users to onboard custom code, IPs, existing models seamlessly.

04

Ensure transparency and AI governance through Explainable AI capabilities.

05

A composable data science studio that can be integrated with existing assets in an organization using various integration options.

06

Guided Analytics alerts users on biasing, overfitting, and underfitting issues while creating pipelines reducing complexity and interactions.

07

Automation is not a black box but a guided built on the AI Trust framework.

08

ML production workbench for seamless deployment and embedding AI into various applications.

Example Use Cases



Sales and Marketing

- Customer Segmentation
- Customer Churn
- Customer Up-Sell/Cross-Sell
- Customer Lifetime Value (CLV)
- Next Best Offer (NBO)



B2B Business

- Product Optimization
- Product Price Optimization
- Revenue & Cost Assurance
- Collections Assurance
- KPI Prediction & Forecasting



Network Operations

- Network Optimization
- Preventive & Predictive Maintenance
- Performance Optimization
- E2E Service Quality Monitoring
- Field Force Dispatch Optimization



Support Functions

- Revenue Forecast
- Employee Turnover
- Workforce Planning
- Risk Analysis
- Talent Management

...and many more.

Interested to know more?

Scan this QR code to see HyperSense AI Studio in action.



Or email us at hypersense@subex.com
to get in touch with an AI expert.





Subex is a pioneer in enabling Digital Trust for businesses across the globe. Founded in 1994, Subex helps its customers maximise their revenues and profitability. With a legacy of having served the market through world-class solutions for business optimisation and analytics, Subex is now leading the way by enabling all-round Digital Trust in the business ecosystems of its customers. Focusing on risk mitigation, security, predictability and intelligence, Subex helps businesses embrace disruptive changes and succeed with confidence in creating a secure digital world for their customers.

Through HyperSense, an end-to-end augmented analytics platform, Subex empowers communications service providers and enterprise customers to make faster, better decisions by leveraging Artificial Intelligence (AI) analytics across the data value chain. The solution allows users without a knowledge of coding to easily aggregate data from disparate sources, turn data into insights by building, interpreting and tuning AI models, and effortlessly share their findings across the organisation, all on a no-code platform.

Subex also offers scalable Managed Services and Business Consulting services. Subex has more than 300 installations across 90+ countries. For more information, visit www.subex.com.

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