

# **日 C3 AI Application Platform**

Enterprise AI Platform for Rapidly Developing, Deploying, and Operating Enterprise-Scale AI Applications

The C3 Al® Application Platform is software that uses a model-driven architecture to accelerate delivery and reduce the complexities of developing enterprise-scale Al applications. The C3 Al Application Platform enables organizations to deliver Al-enabled applications faster than alternative methods.



## C3 AI Studio

C3 AI Studio offers a rich library of deep-code tools and low-code environment for developing, deploying, and operating enterprise AI applications. C3 AI Studio provides a cohesive development experience on a visual canvas providing data ingestion, data modeling, machine learning feature engineering and model lifecycle management, and a metadata-driven UI development tooling. C3 AI Studio allows developers and data scientists to focus on solving complex business problems by providing an integrated environment that abstracts routine and complex application development tasks.



### Deep Code – Visual Studio Code Extension

C3 Al Studio provides technical users with core code-based experiences through C3 Al's extension for the popular Visual Studio Code source-code editor. Developers can use C3 Al specific IntelliSense, leveraging out of the box auto-suggestions and autocompletion across C3 Al Models, data scientists can write custom Python methods and inspect any issues in their logic using an integrated Python debugger, and QA engineers can manage test files across multiple applications.



#### Develop applications in a familiar IDE setting

### Deep Code - JupyterLab

C3 Al's on-demand JupyterLab Notebooks provides an interactive interface to all data and machine learning services, enabling a complete data science lifecycle.



- Leverage C3 AI specific IntelliSense, using autocomplete and recommended suggestions
- Easily read through application code highlighted across specific C3 Al keywords and model references
- Instantly check for errors on data model construction and function implementation with each file save
- Hover over any keyword, data model element or function to receive in-context documentation
- Click into references and implementation files with the code to traverse across an application and its dependencies
- Generate test files specific to data
   model elements and APIs
- Individually run test files or group multiple tests together and run them in sequence or in parallel
- Train and deploy models developed in Jupyter or distribute intensive workloads to an auto-scaling compute cluster
- Take advantage of dedicated compute environments backed by configurable CPU and GPU profiles
- Share and version notebooks across all data scientists in the application, and optionally commit notebooks to the code repository for Cl testing and reuse across applications
- Manage user access levels with C3 Al's centralized role-based access controls
- Import your favorite libraries from public or private repositories to train models and explore data

### Low Code – Application Canvas

C3 AI Studio exposes the power of C3 AI's model-driven architecture through an intuitive application canvas and provides an integrated set of best-of-breed tools allowing business experts, data scientists, data engineers, application developers and IT to easily collaborate on developing, deploying, and operating complex AI Applications.

#### Data

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#### **Machine Learning**

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### **Composable UI**



### **DevSecOps**

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- · Seamlessly integrate disparate internal and external data
- Explore, clean, contextualize, and label data through human-in-the-loop and AI-driven approaches
- Visualize data pipelines and develop features through an integrated code experience, drastically reducing the effort required to move data pipelines into production

- Access all upstream and downstream workflows like data
   engineering and application user interface development
- Configure, run, and track AutoML experiments from the Application Canvas
- · Connect to JupyterLab from the application canvas with one-click

- Leverage low-code tools to easily tailor existing applications to business-specific needs
- Theme entire applications to make sure AI applications match branding guidelines
- · Scaffold new processes and workflows by leveraging low-code tools
- Continue using the tools and libraries in place such as JavaScript, React, SCSS
- Configure continuous integration (CI) pipelines, inspect the qualities of build artifacts, and deploy green builds into production
- Monitor the health of environments, configure environment settings, and manage usage and resourcing
- · Review application build quality and dive deep to diagnose the causes
- Promote release candidates into production safely and analyze the health of deployments
- Leverage a shared repository of C3 AI Applications, using specific data modules, ML modules, or UI modules to help easily extend applications

### **C3 AI Application Platform Services and Capabilities**

The C3 AI Application Platform delivers a set of services and capabilities that provide the ability to deliver AI applications faster than alternative methods. The C3 AI model-driven architecture, a set of data integration, management and processing capabilities, time series services, AI and model management, and a security framework all speed data science and application development to accelerate delivery of AI at enterprise scale.

### **Model-Driven Architecture**

Enable greater data science and application developer productivity, rapidly deliver enterprise-scale AI applications, and future-proof existing IT investments. The C3 AI Application Platform uses conceptual models of all the attributes and processes related to a specific entity or domain as well as physical objects or data stores. The C3 AI model-driven architecture can represent application data, metadata, processes, interrelationships, persistence, computing processes, time series expressions, language bindings, and AI/ML tools and algorithms.

### **Data Integration Services**

Enable rapid integration of data from enterprise, extraprise, and sensor data feeds with support for both structured and unstructured data. The C3 AI Application Platform is able to ingest data in batch, stream, or message-based integrations. The C3 AI Application Platform has prebuilt connectors to many common data sources including Postgres, Oracle, SAP, HBase, HDFS, Apache Kafka, AWS Kinesis, OSI PI, and Cassandra. Data integration services are extensible, enabling developers to configure and enable additional connectors.

### **Data Management Services**

Enable persistence of large volumes of data, while also making data readily available for analytical calculations. Virtualize external data stores within the C3 AI Application Platform for AI algorithms and applications. Data management services include data federation, management of and interaction with multiple databases, and persistence of data in the appropriate data store.

### **Time Series Services**

Enable persistence, processing, and representation of data objects as time series, including the ability to normalize or calendarize data (e.g., time-align data, retrieve time series at different time intervals), identify and flag gaps in data, manage data that are received out of sequence, and apply pre-built (or custom) mathematical expressions on time series data. Seamlessly manage time series data and costs across hot (fast reads/writes, higher costs) and cold (slower reads/writes, lower costs) storage.

### AI and Model Management Services

Manage models across machine learning life cycle stages, including model design and experimentation, model training and evaluation, model integration and deployment, production inference, and model maintenance.

### Security

Deliver end-to-end authentication and authorization, including access control to data and methods, using the role-based, and certified C3 AI security framework. SOC2, SOC3, NIST, and HIPAA attestations.

### **Multi-cloud and Edge Deployments**

Deploy to your private or public cloud instance on Azure, AWS, and Google Cloud Platform, or deploy in a private cloud or at the edge.

### **Proven Results in 8-12 Weeks**

### Visit C3.ai/get-started