Oracle Cloud Infrastructure Data Science

It is no secret that artificial intelligence is revolutionizing the way we live in the world. Businesses of all sizes in all domains are leveraging the power of AI to offer new products, improve customer experience, and increase efficiency. Data scientists are the engineers of the AI revolution. But as data science as we know it is a relatively new and still-evolving discipline, industry standards and best practices are nascent.

DATA SCIENTISTS FACE SIGNIFICANT CHALLENGES

Today's data scientists want to use the latest from the open source ecosystem to solve machine learning problems for their organization. They need to access ever-growing datasets and process petabytes of data efficiently. They don't want to spend the time and may not have the skill set to build out their own data science tools and infrastructure platform. Data scientists within the same organization are often working in silos, using whatever set of tools they have cobbled together, and typically cannot reproduce the work of their colleagues. As a result, operationalizing ML projects is costly, and maintaining models in production over the long-term is nearly impossible.

ORACLE CLOUD INFRASTRUCTURE DATA SCIENCE: DELIVERING A PLATFORM FOR THE ENTERPRISE

With Oracle Cloud Infrastructure Data Science, enterprises can quickly leverage predictive analytics to drive positive business outcomes.

- **Open Source Data Science:** Oracle Cloud Infrastructure Data Science enables data scientists to easily build, train, and manage machine learning models on Oracle Cloud, using Python, JupyterLab, and open source machine learning libraries.
- **Integrated with Oracle's Stack:** It is part of Oracle's Data and AI Platform, which makes it simple to integrate and manage enterprise-scale data and use the power of data science and machine learning for enhanced business results.
- **Secure for the Enterprise:** With multiple layers of security throughout the technology stack, enterprises can have confidence that their critical models are safe and always available.

Key Benefits

- Model lifecycle management, model reproducibility, and auditability
- Includes the best of the Python open source ecosystem, or install any additional package you may need
- No infrastructure or configurations to manage
- Pay only for what you use, on demand
- Collaborative, project-based interface for teams
- Industry-leading model explanation and AutoML capabilities
- Provides access to large, fast, and powerful compute on the Oracle Cloud
- Integrated with key Oracle Data and AI products
- Secure for the enterprise
- Boosts productivity with automated and streamlined data science workflows

ORACLE®

MAKING DATA SCIENCE A TEAM SPORT

Oracle Cloud Infrastructure Data Science has a project-based collaborative interface for teams. It offers a centralized platform for data science assets so that data scientists have visibility into their colleagues' work and can share work, standards, and best practices. The platform's model catalog makes it possible for data scientists to test, evaluate, and deploy all of your organization's models—mitigating the risk around maintenance and upkeep of your mission-critical models.

MODEL REPRODUCIBILITY IS KEY FOR PRODUCTION MODEL MAINTENANCE

Model reproducibility means that each step of the model development and deployment process is tracked, versioned, auditable, and monitored. Whether your business is in a regulated market or not, data scientists need the tools to document their model building, evaluation, and selection steps. With Oracle Cloud Infrastructure Data Science, data scientists can get everything they need to manage the end-to-end lifecycle of their models

BOOSTING PRODUCTIVITY TO GET THE MOST VALUE FROM YOUR DATA

In today's job market, data science skills are in high demand. Lack of time and resources limits the amount of value you can extract from your data. With Oracle Cloud Infrastructure Data Science, data scientists can be more productive with automated workflows and Oracle-managed infrastructure. Oracle's Accelerated Data Science SDK makes common data science tasks faster, easier, and less error-prone. It is a Python library that offers capabilities for data exploration and manipulation, model explanation and interpretation, and AutoML for automated model training, accomplishing in a few lines of code what a data scientist would typically do in hundreds of lines of code. Managed infrastructure means that data scientists can focus on the methodologies and data and stop wasting time on provisioning and configuring hardware and tools. With Oracle Cloud Infrastructure Data Science, it's easier than ever before for data scientists to get started in Oracle Cloud Infrastructure.

FREQUENTLY ASKED QUESTIONS

What languages, tools, and libraries does Oracle Cloud Infrastructure Data Science support?

Oracle Cloud Infrastructure Data Science supports Python, JupyterLab, and a variety of the most popular packages from deep learning libraries like TensorFlow, Keras, and PyTorch, to machine learning libraries like scikit-learn and xgboost, to visualization libraries like Plotly and matplotlib and many more.

What data sources can I access from Oracle Cloud Infrastructure Data Science?

Data can be accessed in nearly any data source and in any format. Data can be on Oracle Cloud Infrastructure (for example, in Oracle Autonomous Data Warehouse or Oracle Cloud Infrastructure Object Storage), on premises (for example, in an Oracle Database), or in another cloud (for example, AWS S3).

How can I try out Oracle Cloud Infrastructure Data Science?

Oracle Cloud Infrastructure Data Science is available in all Oracle Cloud Infrastructure commercial regions. Sign up here for a free trial.

CONNECT WITH US

Call +1.800.ORACLE1 or visit oracle.com. Outside North America, find your local office at oracle.com/contact.

blogs.oracle.com/oracle

facebook.com/oracle

twitter.com/oracle

Integrated Cloud Applications & Platform Services

Oracle is committed to developing practices and products that help protect the environment