

Using Oracle Machine Learning with Autonomous Database 2024 ELS

Oracle Cloud Infrastructure

DURATION

2 Days

MODULES

4 Lectures

COURSE CODE

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Course Overview

Use this as a launching point for exploring the rich capabilities of Oracle Machine Learning. Benefits to you In this course you will learn about the Oracle Machine Learning components and features available on Oracle Autonomous Database. The Oracle Machine Learning components highlighted include OML4SQL, OML4R, OML4Py, OML Notebooks, Oracle Data Miner, OML AutoML UI, and OML Services. Understand how you can take greater advantage of Oracle Autonomous Database for data science and machine learning from SQL, R, Python, and REST APIs and no-code user interfaces

What You Will Learn

- Table of
- Lesson 1: Oracle Machine Learning – Overview
- Cloud-Based Solutionfor Analytics
- El Tronics
- Oracle Autonomous Database
- Basic Machine Learning Flow
- OML: Introduction
- Machine Learning: Horizontal Use Cases
- Use Cases and Machine Learning Techniques
- Industry: Vertical Use Cases
- Lesson 2: Features
- Components
- Oracle Machine Learning
- Steps in the ML process
- Lesson 3: Introduction to Machine Learning for Python
- Oracle Machine Learningfor Python
- Features
- Advantages
- Lesson 4: Introduction to Machine Learning for R
- Features
- Advantages

- Terry's Business Problem
- El Tronics
- Accessing the Oracle Machine Learning Home Page
- Creating a New Project and Workspace
- Creating a New Project
- Selecting the New Project
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- Lesson 6: Users in Workspaces in Oracle Machine Learning
- Managing Workspaces
- Workspace Permissions
- Workspace Permissions Types
- Workspace Permissions
- Moving a Project to a Different Workspace
- Lesson 7: Using the OML Scratchpad Notebook
- Scratchpad Notebooks
- Developing Code
- Simple SQL Queryin Scratchpad

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- Exporting and Importing Notebooks
- Exporting a notebook: Example
- Lesson 8: Restrictions on SQL Commands
- Restrictions for Database Options
- Restrictions for Database Initialization Parameters
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- Lesson 9: Introduction to AutoML in Oracle Machine Learning
- Introduction to AutoML
- AutoML in OML4Py
- The OML AutoML UI Pipeline
- Algorithm Selection
- Feature Selection
- Model Tuning
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- Importing AutoML and Creating the DataFrame
- Algorithm Selection with OML4Py
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- Creating an AutoML UI Experiment
- Oracle Machine Learning Home Page: AutoML
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- Viewing AutoML Experiment Classification Metrics
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- Creating a Notebook from the AutoML Model: Example
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