Build machine learning solutions using Azure Databricks (DP-3014)

ID DP-3014 **Price** CHF 870.—(excl. VAT) **Duration** 1 days

Who should attend

This course is designed for aspiring data scientists and AI engineers who need to train and manage machine learning models by using Azure Databricks.

Course Content

Explore Azure Databricks

- Introduction
- Get started with Azure Databricks
- Identify Azure Databricks workloads
- Understand key concepts
- Data governance using Unity Catalog and Microsoft Purview
- Exercise - Explore Azure Databricks
- Module assessment
- Summary

Use Apache Spark in Azure Databricks

- Introduction
- Get to know Spark
- Create a Spark cluster
- Use Spark in notebooks
- Use Spark to work with data files
- Visualize data
- Exercise - Use Spark in Azure Databricks
- Module assessment
- Summary

Train a machine learning model in Azure Databricks

- Introduction
- Understand principles of machine learning
- Machine learning in Azure Databricks
- Prepare data for machine learning
- Train a machine learning model
- Evaluate a machine learning model
- Exercise - Train a machine learning model in Azure Databricks
- Module assessment
- Summary

Use MLflow in Azure Databricks

- Introduction
- Capabilities of MLflow
- Run experiments with MLflow
- Register and serve models with MLflow
- Exercise - Use MLflow in Azure Databricks
- Module assessment
- Summary

Tune hyperparameters in Azure Databricks

- Introduction
- Optimize hyperparameters with Optuna
- Review trials
- Scale hyperparameter optimization
- Exercise - Optimize hyperparameters for machine learning in Azure Databricks
- Module assessment
- Summary

Use AutoML in Azure Databricks

- Introduction
- What is AutoML?
- Use AutoML in the Azure Databricks user interface
- Use code to run an AutoML experiment
- Exercise - Use AutoML in Azure Databricks
- Module assessment
- Summary

Train deep learning models in Azure Databricks

- Introduction
- Understand deep learning concepts
- Train models with PyTorch
- Distribute PyTorch training with TorchDistributor
- Exercise - Train deep learning models on Azure Databricks
- Module assessment
- Summary

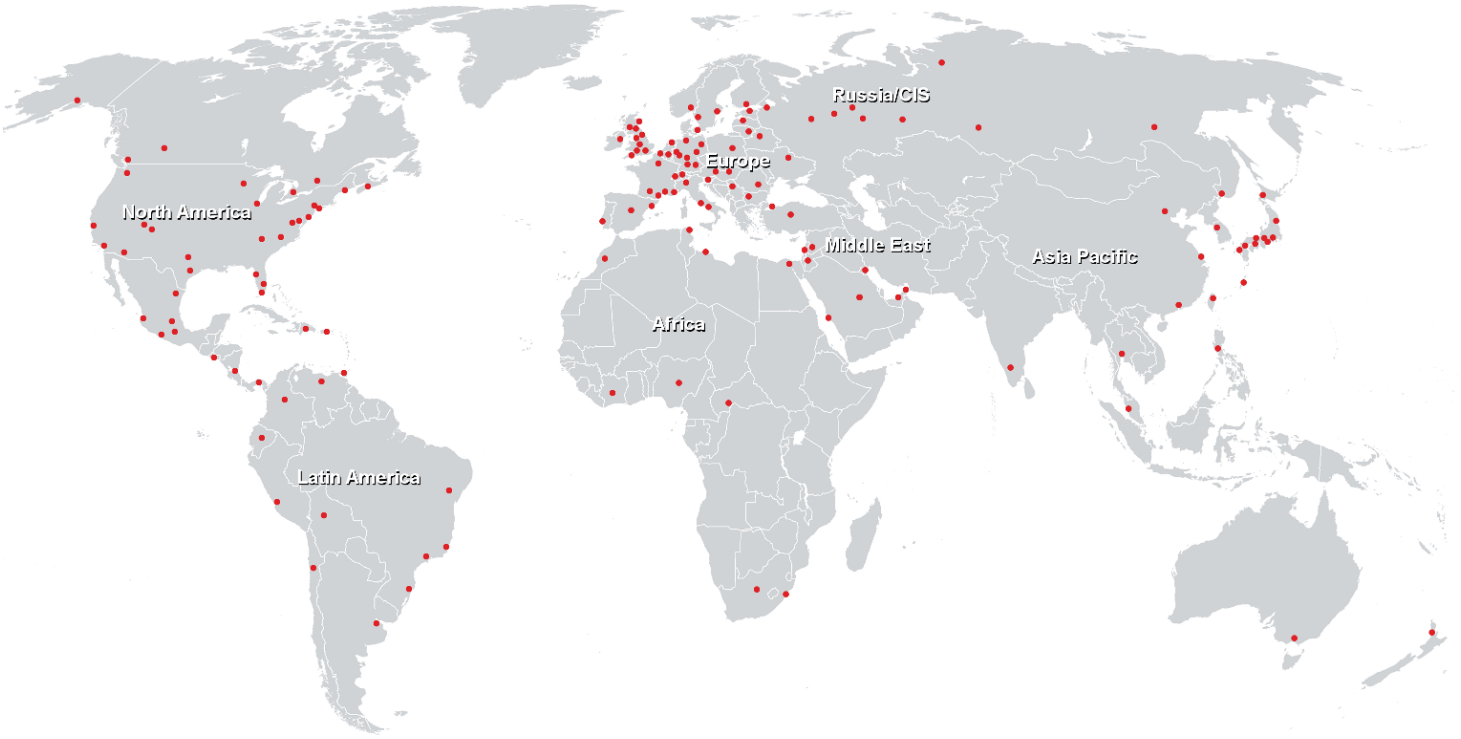
Manage machine learning in production with Azure Databricks

- Introduction
- Automate your data transformations
- Explore model development
- Explore model deployment strategies

- Explore model versioning and lifecycle management
- Exercise - Manage a machine learning model
- Module assessment
- Summary

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