€ TRAINING

Machine Learning with Amazon SageMaker

13 - 17 April 2025
Sharm El-Sheikh (Egypt)

Machine Learning with Amazon SageMaker

REF: B1741 DATE: 13 - 17 April 2025 Venue: Sharm El-Sheikh (Egypt) - Fee: 4095 Euro

Introduction:

This training program provides participants with essential knowledge and skills in machine learning using Amazon SageMaker. It empowers them to leverage Amazon SageMaker for building, training, and deploying machine learning models at scale.

Program Objectives:

At the end of this program, participants will be able to:

- Understand the foundational concepts of machine learning and Amazon SageMaker.

- Develop and train machine learning models using SageMaker.

- Deploy and manage machine learning models in production.

- Utilize SageMaker's built-in algorithms and custom models.

- Implement best practices for machine learning workflows and automation.

Targeted Audience:

- Data Scientists.

- Machine Learning Engineers.

- AI Enthusiasts.

- IT Professionals.

- Technology Consultants.

Program Outline:

Unit 1:

Introduction to Amazon SageMaker:

- Overview of machine learning and its applications.

- Introduction to Amazon SageMaker and its features.

- Setting up the SageMaker environment.

- Understanding SageMaker notebooks.

- Exploring SageMaker's built-in algorithms.

Unit 2:

Data Preparation and Exploration:

- Importing and preparing data for machine learning.

- Data exploration and visualization techniques.

- Data cleaning and preprocessing strategies.

- Feature engineering and selection.

- Using Amazon S3 for data storage and management.

Unit 3:

Model Development and Training:

- Creating and managing SageMaker training jobs.

- Selecting and configuring machine learning algorithms.

- Training models with SageMaker.

- Evaluating model performance and tuning hyperparameters.

- Using SageMaker Experiments to track and compare training runs.

Unit 4:

Model Deployment and Management:

- Deploying machine learning models with SageMaker endpoints.

- Managing model versions and deployments.

- Monitoring and scaling deployed models.

- Integrating SageMaker with other AWS services.

- Implementing A/B testing and model validation.

Unit 5:

Advanced Features and Best Practices:

- Utilizing SageMaker Autopilot for automated model building.

- Implementing SageMaker Pipelines for workflow automation.

- Exploring SageMaker Ground Truth for data labeling.

- Leveraging SageMaker Neo for model optimization.

- Best practices for security and cost management in SageMaker.