



Digital Transformation and Innovation

Machine Learning with AWS

Course Introduction

Machine learning (ML) is one of the fastest growing areas in technology and a highly sought-after skillset in today's job market. It is the biggest shift of the decade in Machine Learning. This training course is designed to provide participants with the concepts of emerging world of patterns, techniques, and practices, in understanding proven solutions to common problems.

This course will discuss various artificial intelligence and machine learning services available on AWS, learn how to use these services to generate impressive results, and of how to use a wide range of AWS services in your own projects.

Target Audience

- Business and technology leaders
- Business Unit Managers
- Business Development Consultants
- General Managers / Regional Managers
- Senior and mid-level leaders
- individual leaders of all levels in the organization
- Art Director
- Marketing Consultants
- Marketing Development Manager

Learning Objectives

- Gain a comprehensive understanding of AWS and its role in Machine Learning
- Build intelligent applications using Amazon AI services like Amazon Comprehend, Amazon Rekognition, Amazon Translate and others.

- Know how to use AWS console and identify the services available for Machine Learning.
- Explore the basics of chatbots and chatbot design.
- Effectively create a Chatbot with Natural Language

Course Outline

• Day 01

Introduction to Machine Learning

- What is Artificial Intelligence?
- What is Machine Learning?
- What is Deep Learning?
- Understanding Neural Networks
- Machine Learning Algorithms Explained

• Day 02

Amazon AI Services: Computer Vision

- Introduction to Amazon Rekognition
- Introduction to AWS DeepLens
- Hands-on Rekognition: Automated Video Editing
- Deep Dive on Amazon Rekognition

Introduction to Amazon Web Services

- The basics of working on AWS using S3.
- Importing and exporting data.
- Using the AWS console and identifying the services available for Machine Learning.
- Create a S3 bucket and import text data into it.

• Day 03

Amazon AI Services: NLP

- Introduction to Amazon Comprehend
- Introduction to Amazon Comprehend Medical
- Introduction to Amazon Translate

- Introduction to Amazon Transcribe
- Deep Dive with Amazon Transcribe

Summarize Text Documents using NLP

- Use Amazon Comprehend to detect the language which a document is written in.
- Extract information such as entities (persons or places), key phrases (noun phrases indicative of the content), and emotional sentiment from a set of documents.
- Sample project: Set up a Lambda function to process and analyze the imported text using Comprehend.

• Day 04

Perform Topic Modeling and Theme Extraction

- Understand what business use cases to apply the machine learning algorithm (Latent Dirichlet Allocation (LDA)) that is used for topic modeling.
- Extract and analyze common themes through topic modeling with Amazon Comprehend.
- Sample project: Perform topic modeling on a set of documents and analyze the results.

• Day 05

Creating Chatbot with Natural Language

- Explore the basics of chatbots and chatbot design.
- Set up with the Amazon Lex service and create a sample chatbot to order flowers.
- Create a custom chatbot which will look up market prices for a given stock.

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
April 14, 2025	April 18, 2025	5 days	4250.00 \$	UAE - Abu Dhabi
July 14, 2025	July 18, 2025	5 days	4250.00 \$	UAE - Dubai

FROM	TO	DURATION	FEEs	LOCATION
Oct. 13, 2025	Oct. 17, 2025	5 days	4250.00 \$	UAE - Dubai