

Module Title : Deep Learning on AWS

Duration : 1 day

Description

In this one-day course, you will learn cloud-based deep learning (DL) solutions on the AWS platform. You will learn how to run your models on the cloud using Amazon EC2-based deep learning Amazon Machine Image (AMI) and Apache MXNet on AWS frameworks. In addition, you will learn how to use Amazon SageMaker and deploy your deep learning models using AWS services like AWS Lambda and Amazon Elastic Container Service (Amazon ECS)—all while designing intelligent systems on AWS.

Intended Audience

This course is intended for:

- Developers who are responsible for developing deep learning applications
- Developers who want to understand concepts behind deep learning and how to implement a deep learning solution on AWS

Course Objectives

In this course, you will learn how to:

- Define machine learning (ML) and deep learning
- Identify the concepts in a deep learning ecosystem
- Leverage Amazon SageMaker and MXNet programming frameworks for deep learning workloads
- Fit AWS solutions for deep learning deployments

Prerequisites

We recommend that attendees of this course have the following prerequisites:

- Basic understanding of machine learning processes
- Basic understanding of AWS core services like Amazon EC2 and knowledge of AWS SDKs
- Basic knowledge of a scripting language, such as Python

Delivery Method

This course is delivered through a mix of:

- Classroom training
- Hands-on labs

Hands-on Activity

This course allows you to test new skills and apply knowledge to your working environment through a variety of practical exercises.

Course Outline

This course covers the following concepts:

- Machine Learning
- Deep Learning
- How to set up a DL AMI instance and run a multi-layer perceptron neural network model
- MXNet on AWS
- How to run a convolutional neural network (CNN) model to predict images using CIFAR 10 datasets
- How to deploy smart applications on AWS
- How to deploy a DL model for predicting images using AWS Lambda