



CLOUD COMPUTING AND VIRTUALISATION

# Deep Learning on AWS

LENGTH

**1 day**

PRICE (Incl. GST)

**\$950**

## AWS AT LUMIFY WORK

Lumify Work is an official AWS Training Partner for Australia, New Zealand, and the Philippines. Through our Authorised AWS Instructors, we can provide you with a learning path that's relevant to you and your organisation, so you can get more out of the cloud. We offer virtual and face-to-face classroom-based training to help you build your cloud skills and enable you to achieve industry-recognised AWS Certification.



## WHY STUDY THIS COURSE

In this course, you'll learn about AWS's deep learning solutions, including scenarios where deep learning makes sense and how deep learning works.

You'll learn how to run deep learning models on the cloud using Amazon Sage Maker and the MXNet framework. You'll also learn to deploy your deep learning models using services like AWS Lambda while designing intelligent systems on AWS.

This intermediate-level course is delivered through a mix of instructor-led training (ILT), hands-on labs, and group exercises.

## WHAT YOU'LL LEARN

This course is designed to teach participants how to:

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

<https://www.lumifywork.com/en-au/courses/deep-learning-on-aws/>





# Deep Learning on AWS



*My instructor was great being able to put scenarios into real world instances that related to my specific situation.*

*I was made to feel welcome from the moment I arrived and the ability to sit as a group outside the classroom to discuss our situations and our goals was extremely valuable.*

*I learnt a lot and felt it was important that my goals by attending this course were met.*

*Great job Lumify Work team.*



**AMANDA NICOL**  
IT SUPPORT SERVICES  
MANAGER - HEALTH WORLD  
LIMITED

## COURSE SUBJECTS

### Module 1: Machine learning overview

- A brief history of AI, ML, and DL
- The business importance of ML
- Common challenges in ML
- Different types of ML problems and tasks
- AI on AWS

### Module 2: Introduction to deep learning

- Introduction to DL
- The DL concepts
- A summary of how to train DL models on AWS
- Introduction to Amazon SageMaker
- Hands-on lab: Spinning up an Amazon SageMaker notebook instance and running a multi-layer perceptron neural network model

### Module 3: Introduction to Apache MXNet

- The motivation for and benefits of using MXNet and Gluon
- Important terms and APIs used in MXNet
- Convolutional neural networks (CNN) architecture
- Hands-on lab: Training a CNN on a CIFAR-10 dataset

### Module 4: ML and DL architectures on AWS

- AWS services for deploying DL models (AWS Lambda, AWS IoT Greengrass, Amazon ECS, AWS Elastic Beanstalk)
- Introduction to AWS AI services that are based on DL (Amazon Polly, Amazon Lex, Amazon Rekognition)

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- Hands-on lab: Deploying a trained model for prediction on AWS Lambda

*Please note: This is an emerging technology course. Course outline is subject to change as needed.*

## Lumify Work Customised Training

*We can also deliver and customise this training course for larger groups saving your organisation time, money and resources.*

*For more information, please contact us on [1 800 853 276](tel:1800853276).*

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## WHO IS THE COURSE FOR?

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

## PREREQUISITES

It is recommended that attendees have the following prerequisites:

- Basic understanding of machine learning (ML) processes
- Knowledge of AWS core services like Amazon EC2 and knowledge of AWS SDK
- Knowledge of a scripting language like Python

The supply of this course by Lumify Work is governed by the booking terms and conditions. Please read the terms and conditions carefully before enrolling in this course, as enrolment in the course is conditional on acceptance of these terms and conditions.

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