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Sign up

Apache MXNet training
2 days (14 hours)

Presentation

Apache MXNet is a flexible, open-source library that has become popular for research and prototype production.

In fact, Apache MXNet is a scalable tool and will enable efficiency for different models. What's more, it supports flexible programming in several languages, including C++, JavaScript, Scala, Python...

In this training course, your team will learn how to use Apache MXNet to build and deploy learning models. They will also be able to efficiently build neural networks and create a convolutional neural network for image classification.

Learning Apache MXNet will enable you to easily train and deploy deep neural networks.

Our training will be based on the latest version of the software, Apache MXNet 1.9, available on GitHub.

Objectives

- Understanding different networks (convolutional and recurrent)
- Understand MXNet architecture and data structure
- Configuring and installing Apache MXNet and components

Target audience

- Data Analyst / Data Scientist / Data Engineer
- Developers
- Big Data Architects

- Lead Developer

Prerequisites

Knowledge of Python.

Apache MXNet training program

INTRODUCTION APACHE MXNET

- What is Apache MXNet?
- Deep Learning Python language
- GPU
- The different neural networks
  - convolutional
  - short- and long-term recurring

MXNET INSTALLATION

- Installing the various modules
- Amazon SageMaker
- Packages
- Operating environment
  - Windows
  - macOS
  - Linux

MXNET GLUON

- What is Gluon?
- The benefits of the Gluon API
- NDArray
  - C++ Package
  - Source Python
  - Matrix
  - Operations
  - Indexation
- Autograd
- Blocks
  - Custom layers
  - Layers
  - The different blocks
  - Parameters
- Automatic differentiation

- GluonNLP toolbox
  - String
  - Rules
  - Input
  - Training scripts
  - Hyper-parameters
  - Runtime Logs

Companies concerned

This training course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.