

Training - Machine Learning Concepts



MLBASIC-EN-D



Distance only



3 days

Machine learning is a subfield of Artificial Intelligence that acts as a bridge between Data Science and Artificial Intelligence. Its objective is to understand the structure of data and to build data-driven models for further automate decision-making processes, in most technical domains including the O&G industry

Level

Awareness

Public

The course is intended for O&G professionals interested in machine learning and its applications to O&G

Objectives

Attendees will be able to implement the following skills:

- describe the different types of machine learning, algorithms, techniques and models
- identify the main programming languages used in machine learning
- examine some machine learning applications in the O&G industry

Pedagogical & technical resources

Interactive lectures and exercises

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites

No prerequisites are necessary to follow this course

Responsible

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

INTRODUCTION TO MACHINE LEARNING

MACHINE LEARNING METHODS

Supervised machine learning.
Unsupervised machine learning.

COMMON ALGORITHMIC APPROACHES

Decision tree, K nearest neighbors, deep learning.

PROGRAMMING LANGUAGES

Python, Java, R, C++.

EVALUATING MACHINE LEARNING MODELS

Quantify errors; testing and validation.

EXAMPLES OF MACHINE LEARNING APPLICATIONS IN O&G

To French entities : IFP Training is referenced to DataDock ; you may contact your OPCO about potential funding.

Please contact our disabled persons referent to check the accessibility of this training program : referent.handicap@ifptraining.com