CYBERPORT ACADEMY
Business Unit Of MSC Cyberport Sdn. Bhd.

MACHINE LEARNING

IN THE ALGORITHM ECONOMY, AI IS REVOLUTIONISING THE WORLD OF COMPUTING AND DIGITAL INTERACTIONS.

(!) A rapidly-growing field within Artifical Intelligence, ML allows machines to learn from huge volumes of complex data and self-improve. It powers technologies like recommendation engines, facial recognition, fraud protection, self-driving cars and more.

(i) Market size is expected to grow from USD 1.03 Billion in 2016 to USD 8.81 Billion by 2022. Demand for Machine Learning (ML) engineers will soar 60% by 2020. **Source: MarketandMarkets**

Visit our website at www.cyberportacademy.com or contact 07- 276 1251

Machine Learning for Business Intelligence

HRDF Claimable! | Duration: 2 days instructor-led course

Course Overview

In this course, we introduce the field of machine learning and describe the well-known processes, algorithms, and tools for one to be a successful machine learning practitioner.

This course will help to build skills in data acquisition and modeling classification, and regression. In addition, one will also get to explore very important tasks such as model validation, optimization, scalability, and real-time streaming.

Prerequisites

Anyone working with Business Intelligence and Data Analysis.

Who Should Attend

Anyone who is keen to learn to learn more in-depth about Machine Learning and the real applications of Machine Learning for Business Intelligence today.

Exam Format

Students will be given a Certificate of Attendance after successfully completing the course.

Course Objectives

- Introducing the basic concepts and practical applications of Machine Learning algorithms.
- Providing students with the capabilities to: (i) identify the long-term impact of machine learning to businesses; (ii) apply machine learning algorithms to their own real-world problems.

Learning Outcomes

Students will be able to:

- Explain machine learning concepts & describe applications of well-known machine learning algorithms
- Apply machine learning techniques to a list of practical problems

Course Outline

Day 1: The Machine Learning Workflow

What is machine learning?

- How Machines Learn
- Using Data to Make Decisions
- The Machine Learning Workflow: from Data to Deployment
- Boosting Model Performance with Advanced Techniques

Real-world dataModeling and prediction

- Data collection• Basic machine learning
- Pre-processing data for modeling modeling
- Using data visualization• Classification
- Regression

Model evaluation and optimization

- Model generalization: evaluating predictive accuracy for new data
- Evaluation of classification models
- Evaluation of regression models
- Model Optimization through Parameter Tuning

Basic feature engineering

- Why is Feature Engineering Useful?
- Basic feature engineering process
- Feature selection

Day 2: Practical Applications

Example: NYC taxi data

- Data visualization and preparation
- Modeling

Advanced feature engineering

- Advanced text features
- Image features
- Time-series features

Advanced Natural Language Processing (NLP) example: movie review sentime

- Exploring data and use case
- Extracting basic NLP features and building the initial model
- Advanced algorithms and model deployment considerations

Scaling machine-learning workflows

- Before scaling up
- Scaling Machine learning modeling pipelines
- Scaling predictions

Example: digital display advertising

- Digital Advertising
- Digital Advertising Data
- Feature Engineering and
  Modeling Strategy
- Size and Shape of Data
- Singular Value Decomposition

- Resource Estimation and
  Optimization
- Modeling
- K-nearest neighbors
- Random forests
- Other Real Word Considerations

Testimonials

Hear what Our Students Have to Say

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This is a good course to learn the overall idea of machine learning implementation, which comes with some hands on exercises.

Rosdy Bin Ab Aziz @ Achit, IT Executive TM Berhad.

The trainer answers your questions based on his real experience which you can easily relates with your current works.

Faridah Hani, UNITEN

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