€TRAINING

# Introduction to Artificial Intelligence

4 - 8 November 2024
Amsterdam (Netherlands)

# Introduction to Artificial Intelligence

REF: W1588 DATE: 4 - 8 November 2024 Venue: Amsterdam (Netherlands) - Fee: 6145 Euro

## Introduction:

The Introduction to Artificial Intelligence training program provides a fundamental understanding of AI concepts and applications. Participants explore AI's history, current capabilities, and potential impact across industries. Through theoretical learning and practical exercises, individuals establish a foundational knowledge base for further exploration in AI.

## Program Objectives:

### At the end of this program the participants will be able to:

- Understand the foundational concepts of Artificial Intelligence.
- Explore the diverse applications of AI in business and industry.
- Develop proficiency in core mathematical concepts and programming languages relevant to AI.
- Gain practical skills and knowledge to embark on further exploration and application of AI technologies.

## Targeted Audience:

- Professionals seeking to enhance their understanding of AI concepts and applications.
- Business leaders and decision-makers looking to leverage AI for strategic advantage.

## Program Outlines:

### Unit 1:

### Introduction to Artificial Intelligence:

- Course Introduction.
- Introduction.

### Unit 2:

### Decoding Artificial Intelligence:

- Decoding Artificial Intelligence and its meaning, scope, and stages.

- Exploring the three stages of Artificial Intelligence and its applications.
- Investigating applications like image recognition and examples of AI's impact across industries.
- Analyzing the effects of Artificial Intelligence on society, including its role in telemedicine and solving complex social problems.
- Understanding the benefits AI offers multiple industries and 11 key takeaways.
- Concluding with a knowledge check to reinforce learning and comprehension.

## Unit 3:

## Fundamentals of Machine Learning and Deep Learning:

- Exploring the meaning of Machine Learning and its relationship with Statistical Analysis
- Understanding the process and types of Machine Learning, including Unsupervised and Semi-supervised Learning
- Delving into Machine Learning algorithms such as Regression, Naive Bayes, and Deep Learning
- Defining concepts like Artificial Neural Networks, Perceptron, and Online vs. Batch Learning
- Highlighting key algorithms and their applications in Machine Learning
- Concluding with key takeaways and a knowledge check to reinforce understanding.

## Unit 4:

## Machine Learning Workflow:

- Learning Objective: Understand the Machine Learning Workflow.
- Acquire more data and formulate sharp questions for analysis.
- Add and assess data quality in the dataset.
- Transform features and extract meaningful insights to answer questions.
- Utilize the obtained answers effectively and reinforce learning with key takeaways and a knowledge check.

## Unit 5:

## Performance Metrics:

- Understanding the need for Performance Metrics and key methods employed.
- Exploring the components of a Confusion Matrix with an example.

- Identifying terms associated with the Confusion Matrix and strategies to minimize false cases.
- Examining metrics like Accuracy, Precision, Recall Sensitivity, Specificity, and F1 Score.
- Concluding with key takeaways and a knowledge check to reinforce understanding.

info@euro-training.net
+447447999485 - +447492882996