€TRAINING

Introduction to Artificial Intelligence

9 - 13 June 2024
Sharm El-Sheikh (Egypt)
Sheraton Sharm Hotel,
Resort,

Introduction to Artificial Intelligence

REF: W1588 DATE: 9 - 13 June 2024 Venue: Sharm El-Sheikh (Egypt) - Sheraton Sharm Hotel, Resort, Fee: 4095 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.