Dealing With Analytics Through Artificial Intelligence

Duration: 5 Days

Language: en

Course Code: IND02-109

Objective

Upon completion of this course, participants will be able to:

- Understand the importance of managing analytics within an organisation.
- Establish organisational goals and objectives and create action plans detailing them.
- Utilise artificial intelligence to gather, analyse and present key data.
- Evaluate the various types of artificial intelligence systems and which ones are ideal for conducting different tasks.
- Identify ideal circumstances for using artificial intelligence.
- Assess the reliability of different artificial intelligence systems and minimise associated risks.
- Align artificial intelligence with analytic goals to improve organisational functions and processes.

Audience

This course is designed for anyone responsible for data analytics within an organisation. It would be most beneficial for:

- Data Analysts
- Business Analysts
- Operations Managers
- Chief Information Officers (CIOs)
- Artificial Intelligence Engineers
- Machine Learning Engineers
- Quality Assurance Managers
- Finance Managers

Training Methodology

This course uses a variety of adult learning styles to aid full understanding and comprehension. Participants will review established businesses who utilise various AI systems to highlight efficient data analysis processes and potential areas for improvement. Participants will be supplied with all the necessary tools to successfully participate in a range of learning exercises. In conjunction with these, they will also participate in seminars, group discussions, demonstrations, and group activities. This is to guarantee full comprehension of the taught content and related skills.

Summary

For an organisation or business to function successfully, there needs to be a strong focus on analysing and processing data from a variety of sources. As the business, market, and industry develop, an increasing amount of data is generated, which is too vast for an individual or team to process manually. However, as new artificial intelligence technology emerges, data analysis processes can be automated.

The primary use of artificial intelligence is to gather, analyse, and present data. Artificial intelligence systems can be assigned a wide range of tasks, such as product ranking and customer segmentation, to reduce the workload of those responsible for data analysis. To implement these systems, one must understand the different types of artificial intelligence systems, their structures, and inner algorithms.

However, it is essential to manage these systems and consistently monitor performance. Several factors can negatively influence collected data, and these will need to be examined and resolved to ensure all future results are viable and free from inaccuracies or bias.

Course Content & Outline

Section 1: Intelligent Decisions with Artificial Intelligence

- The importance of effective decision making in business.
- Guaranteeing intelligent decision making through data analysis.
- Explaining the concepts, principles and purpose of artificial intelligence and machine learning.
- Common types of AI systems and their typical uses.
- Exploring the benefits and limitations of different AI systems.
- How AI can encourage intelligent decision-making.

Section 2: Analysing Data

- The vitality of gathering, analysing, and recording data.
- Methods of data analysis – Monte Carlo simulation, cohort, cluster, sentiment, and factor analysis.
- Identifying the advantages and disadvantages of different data analysis methods.
- Integrating AI systems to automatically analyse datasets.
- Increasing the efficiency of gathering and analysing data with AI.
- Using data to explain why particular events occurred and predict future market and business changes.

Section 3: Machine Learning

- The role of machine learning within an AI system.
- Understanding the main types of machine learning – supervised, reinforced and unsupervised.
- The processes of classification, clustering, and regression for different datasets.
- Using these processes for customer segmentation and the ranking of products, services, and users.
- Conducting a basket analysis with machine learning systems.

Section 4: Thinking Like Humans

- Balancing human knowledge with machine knowledge.
- Automating predictive modelling and analysis through deep learning.
- How deep learning structures and algorithms imitate the way the human brain gains knowledge.
- Deep learning structures and algorithms – neural networks, node layers, input layer, hidden layers, and output layers.

Section 5: Measuring Performance

- AI system optimisation through genetic algorithms and swarm intelligence.
- Evaluating the internal and external factors that influence the success of AI and data analytic projects.
- Managing system risks and minimising potentially damaging influences.
- Methods of effectively monitoring AI system performance.
- Examining inaccurate results, carefully identifying the cause, and rectifying them.

Certificate Description

Upon successful completion of this training course, delegates will be awarded a Holistique Training Certificate of Completion. For those who attend and complete the online training course, a Holistique Training e-Certificate will be provided.

Holistique Training Certificates are accredited by the British Assessment Council (BAC) and The CPD Certification Service (CPD), and are certified under ISO 9001, ISO 21001, and ISO 29993 standards.

CPD credits for this course are granted by our Certificates and will be reflected on the Holistique Training Certificate of Completion. In accordance with the standards of The CPD Certification Service, one CPD credit is awarded per hour of course attendance. A maximum of 50 CPD credits can be claimed for any single course we currently offer.
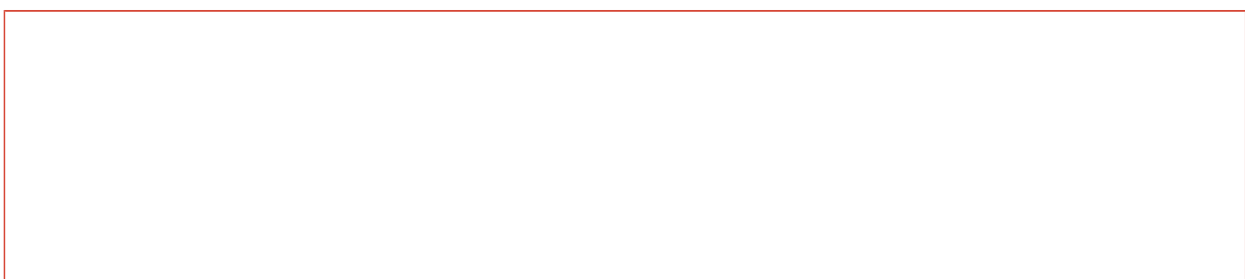
Categories

IT & Computer Application, Technology, AI, Data and Visualisation

Tags

IT, AI, technology, Computer Application

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