€TRAINING

Comprehensive AI and Machine Learning for Business

3 - 14 November 2024
Istanbul (Turkey)

Comprehensive AI and Machine Learning for Business

Introduction:

This training program is designed to provide IT professionals with a thorough understanding of artificial intelligence AI and machine learning ML principles and their practical applications in a business context. It covers foundational concepts, advanced techniques, and real-world implementation strategies. Participants will gain the skills necessary to leverage AI and ML technologies to enhance business operations, develop intelligent systems, and drive innovation within their organizations.

Program Objectives:

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

- Understand the core principles and concepts of AI and machine learning.

- Apply AI and ML techniques to solve business problems and improve decision-making.

- Implement generative AI and automation strategies within business processes.

- Analyze and integrate AI tools and technologies into business strategies.

- Address ethical considerations and manage risks associated with AI deployment.

- Explore the historical evolution of AI and its foundational theories.

- Develop and evaluate AI models and intelligent systems.

- Utilize AI development tools and platforms for practical applications.

- Assess the impact of AI on business and develop strategies for future integration.

Targeted Audience:

- IT professionals.

- Business analysts.

- Data scientists.

- Technology managers.

- Decision-makers involved in strategic planning and technology integration.

Program Outline:

Unit 1:

Introduction to AI and Machine Learning:

- Overview of artificial intelligence and machine learning.

- Key concepts and terminologies in AI and ML.

- Historical evolution and foundational theories of AI.

- Overview of AI applications in various industries.

- Introduction to the AI development lifecycle.

Unit 2:

Generative AI and Tools:

- Understanding generative AI and its capabilities.

- Tools and technologies for generative AI.

- Practical applications of generative AI in business.

- Successful generative AI implementations.

- Hands-on exercises with generative AI tools.

Unit 3:

Expert Systems and Machine Learning Concepts:

- Introduction to expert systems and their components.

- Fundamental concepts of machine learning and algorithms.

- Supervised vs. unsupervised learning.

- Introduction to neural networks and deep learning.

- Expert systems and machine learning models.

Unit 4:

AI in Business:

- Applications of AI in business operations.

- Enhancing customer experiences with AI.

- AI-driven decision support systems.

- AI for process optimization and efficiency.

- Case studies of AI impact in business.

Unit 5:

Implementing Generative AI in Business:

- Strategies for integrating generative AI into business processes.

- Identifying opportunities for generative AI applications.

- Developing and deploying generative AI solutions.

- Evaluating the impact of generative AI on business performance.

- Best practices for managing generative AI projects.

Unit 6:

AI and Automation in Business Strategy:

- Role of AI and automation in business strategy development.

- Implementing AI and automation for strategic advantage.

- Aligning AI initiatives with business objectives.

- Measuring the effectiveness of AI-driven automation.

- Tools and frameworks for AI and automation strategy.

Unit 7:

Ethical Approaches to AI and Risk Management:

- Understanding ethical considerations in AI deployment.

- Managing risks associated with AI technologies.

- Developing ethical guidelines and policies for AI use.

- Ethical issues in AI applications.

- Strategies for risk assessment and mitigation in AI projects.

Unit 8:

Principles of AI Toward Problem Solving:

- AI principles for problem-solving and decision-making.

- Knowledge representation and inference techniques.

- Developing AI solutions for complex problems.

- Applications of AI in problem-solving.

- Exercises with AI problem-solving techniques.

Unit 9:

AI Development Tools and Techniques:

- Overview of AI development tools and platforms.

- Introduction to programming languages for AI e.g., Python, R.

- Tools for data mining and analysis.

- Developing and evaluating AI models using development tools.

- Famous AI Development Tools.

Unit 10:

Exploring Intelligent Systems and Applications:

- Overview of intelligent systems and their applications.

- Investigating applications of AI techniques in various domains.

- Machine learning models.

- Assessing the current scope and potential of intelligent systems.

- Future trends and innovations in AI and machine learning.