Scandinavian Academy

for Training and Development AB

Course: Smart Data Analysis Using AI Technologies

Code	City	Hotel	Start	End	Price	Language - Hours
852	Beijing (China)	Hotel Meeting Room	2025-12-15	2025-12-19	5450 €	En - 25

Course Introduction

With the exponential growth of data and the rapid advancement of artificial intelligence (AI) technologies, organizations increasingly rely on smart data analysis to extract strategic insights and make data-driven decisions. AI enhances analytical accuracy, improves predictive capabilities, and extracts valuable information from various sources, ultimately boosting organizational efficiency and competitiveness.

This course aims to equip participants with advanced knowledge and skills in data analysis using AI techniques, focusing on machine learning applications, text and image analysis, and advanced statistical analysis.

General Course Objective

To enable participants to effectively understand and apply AI technologies in data analysis, enhancing their ability to extract valuable insights from big data. This supports data-driven strategic decision-making and fosters the development of innovative solutions across various industries.

Course Objectives

- Understand the fundamentals of AI and machine learning and their applications in data analysis.
- Learn about artificial neural networks and improve their performance using advanced optimization techniques.
- Develop skills in text analysis and extracting valuable insights using AI.

- Apply advanced statistical analysis for differential and categorical data classification.
- Analyze audio and images using AI techniques to extract meaningful knowledge.
- Explore the latest trends in AI and their impact on data analysis.

Target Audience

- Data analysts and researchers looking to enhance their skills using AI techniques.
- Software developers and engineers interested in AI applications for data analysis and machine learning.
- Executives and decision-makers seeking to understand how AI can be leveraged for strategic decision-making.
- AI enthusiasts who want to expand their knowledge of advanced data analysis techniques.

Course Outline

Fundamentals of Data Analysis and AI Technologies

- Introduction to data analysis and its importance in decision-making.
- Overview of AI and its various applications.
- Exploring tools and techniques used in data analysis.
- Hands-on application of AI tools for data analysis.

Machine Learning Techniques and Advanced Applications

- Introduction to machine learning and its role in data analysis.
- Enhancing AI model performance using adaptive optimization techniques.
- Understanding deep learning networks and their types.
- Building a machine learning model for data pattern recognition.

Text Analysis Using AI

- Introduction to text analysis and its business applications.
- Converting text into analyzable features using Natural Language Processing (NLP).
- Sentiment analysis and text classification using AI.
- Extracting insights from textual data for decision-making.

Audio and Image Analysis Using AI

- Introduction to audio and image analysis techniques and their practical applications.
- Feature extraction from audio using deep learning techniques.
- Image recognition and pattern detection using AI.
- Developing an AI model for image classification or speech recognition.

The Future of AI and Advanced Analytics

- Emerging trends in AI and their impact on data analysis.
- Advanced analytics applications in business and decision-making.
- Ethical considerations and challenges in AI-driven data analysis.
- Case study: Real-world AI applications in smart data analysis.

The Scandinavian Academy for Training and Development adopts the latest scientific and professional methodologies in training and human resource development, aiming to enhance the efficiency of individuals and organizations. Training programs are delivered through a comprehensive approach that includes:

- Theoretical lectures supported by PowerPoint presentations and visual materials (videos and short films).
- Scientific evaluation of participants before and after the program to measure progress and knowledge acquisition.
- Brainstorming sessions and practical role-playing to simulate real-life scenarios.
- Case studies tailored to align with the training content and participants work nature.
- Assessment tests conducted at the end of the program to evaluate the achievement of training objectives.

Each participant receives the training material (both theoretical and practical) in printed form and saved on a CD or flash drive. Detailed reports, including attendance records, final results, and overall program evaluations, are also provided.

Training materials are prepared professionally by a team of experts and specialists in various fields. At the end of the program, participants are awarded a professional attendance certificate, signed and accredited by the Scandinavian Academy for Training and Development.

Program Timings:

- 9:00 AM to 2:00 PM in Arab cities.
- 10:00 AM to 3:00 PM in European and Asian cities.

The program includes:

- A daily buffet provided during the sessions to ensure participants comfort.