

Use of Artificial Intelligence in Banking

Description

The Use of Artificial Intelligence in Banking training covers how artificial intelligence and machine learning technologies are used in the banking sector, the advantages and application areas of these technologies. The aim of the training is to provide participants with information on how artificial intelligence can be integrated in banking and how these technologies are transforming banking operations. The purpose of this tutorial is

- To introduce the basic concepts of artificial intelligence and machine learning and the applications of these technologies in the banking sector.
- To explain the advantages of artificial intelligence in banking transactions and how these technologies improve the customer experience.
- To improve the application skills of the participants by providing examples of artificial intelligence-based solutions.

Audience

Banking sector professionals.

Data scientists and analysts.

Information technology and software development teams.

Managers looking for innovative solutions in banking.

Outline

Artificial Intelligence Fundamentals

- What is Artificial Intelligence?
- What are the Application Areas of Artificial Intelligence? Real Life Examples.
- What are the Applications of Artificial Intelligence in the Financial Sector?
- What are the Future of Artificial Intelligence and Its Approaches?
- Overview of Artificial Intelligence and Its Applications
- Artificial Intelligence Sub-Branches

Fundamentals of Data Science

- What is Data Analysis? What Can Be Done With Data Analysis?
- What is Data Science?
- What are the Elements of Data Science?
- How Do the Stages of Extracting Useful Information from Data Work? (Data Analytics)
- Application Examples of Data Analytics in the Financial Sector

How to Apply Data Science in the Business Process Cycle

- CRISP-DM Methodology

Key Stages of Application Development in Data Science

Artificial Intelligence Application Development on Financial Data - Exploratory Data Analysis

Developing Data Science Applications with Python

- Python Programming Language Overview
- Development Environments Used to Develop Programs with Python
- Fundamentals of Python Programming Language

Data Literacy

- Data Set Loading/Reading from File (Excel, CSV, etc.)
- Display of Data
- Obtaining information about the size of the data

- Sampling in Data
- Data Types in Data
- Obtaining Basic Statistical Information

Data Preparation and Cleaning

- Data Recognition
- Attribute Viewing and Selecting
- Sorting and Grouping
- Operations on Attributes (Adding, Deleting, Updating)
- Operations on Observations (Impression, Insert, Delete)
- Data Filtering
- Operations on Missing Data (Detection, Deletion, Filling)
- Operations on Repetitive Data (Detection, Cleaning)
- Data Conversion Operations
- Detecting Outlier/Extreme Data
- Data Visualization

Data Analysis Application Studies on Financial Data Sets

Data Science (Artificial Intelligence) Application Development - Machine Learning

Technical Concepts in the Machine Learning Application Process

- Basic Concepts and Terminology
- Types of Learning
- Feature Engineering
- Machine Learning Models Success Evaluation Methods
- Scikit-Learn Module and Machine Learning

Machine Learning Algorithms/Models and Application Development

- Regression Models (Theory, Model, Estimation)
- Classification Models (Theory, Model, Prediction)
- Clustering Models (Theory, Model, Prediction) (Unsupervised Learning Application)