

Data Literacy

Duration: 4 Days · **Training format:** Virtual Classroom / Online

Description

Data literacy is defined as the ability of individuals to understand, interpret, evaluate and use data effectively. This skill includes individuals' ability to think data-based, perform data analysis, visualize data, manage data, and make data-driven decisions.

Data literacy is becoming more and more important today. Because large amounts of data are produced in the digital age, meaningful use of this data is critical for accessing information and making effective decisions. Individuals with data literacy skills can analyze data, distinguish between true and false data, represent data visually, and make informed decisions based on these data.

Data literacy is valuable in many areas in business, academic research, public policy, and individual life. Through data literacy, individuals can participate in informed discussions, make informed decisions, and generate data-based solutions.

Data literacy is also important in data security and privacy issues. Individuals with data literacy skills can understand how their personal data is used, detect data breaches, and be conscious of secure data use.

In conclusion, data literacy refers to individuals' ability to understand and effectively use data. This skill is becoming more and more important with the developing technology and big data in the information age.

Outline

Data Science Basic Concepts

- What is Data?
- What is Data Analytics? 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)
- Uses of Data Science

Data Literacy

- What is Data Literacy?
- Basic Concepts of Data Literacy
- Data Identification

- Organization and Reduction of Data
- Representation of Data
- Data Analysis and Evaluation

How is Data Science Applied in the Business Process Cycle?

- CRISP-DM Methodology
- Business Sense

Basic Stages of Application Development in Data Science

Tools for Application Development in Data Science

- Pandas (Data Manipulation)
- Numpy (Algebraic Operations)
- Matplotlib and Seaborn (Data Visualization)

Data Literacy Applications with Python

- Loading/Reading a Data Set from a File
- Data Visualization
- Learn about the size of the data
- Sampling in Data
- Types of Data in Data
- Obtaining Basic Statistical Knowledge

Data Preprocessing and Cleaning

- Data Recognition
- Viewing and Selecting Attributes
- Sorting and Grouping
- Operations on Attributes
- Actions on Observations
- Data Filtering
- Missing Data
- Recurring Data
- Data Transformations
- Detecting Outlier/Extreme Data

Exploratory Data Analysis

- Data at a Time
- Data Selection
- Data Preprocessing
- Data Cleansing

- Using Re (regular expression) in Data Analysis
- Statistical Operations on Numerical Data

Data Visualization

- Chart drawing (line, bar, pie, heat/heatmap, etc.)
- Perform actions on charts

Data Analysis Application Studies on Ready Data Sets

Ready Data Analysis Report Creation Tools

Prerequisites

There are no prerequisites for this course.