Data Literacy

Course ISI-1629 1 Day Instructor-led, Hands on

Introduction

In the future, organizations that succeed will be those that put data at the forefront of their business strategy. This Data Literacy training is designed to give you a high level overview of the key topics in Data Science and Machine Learning. Designed exclusively for students who want to learn about the basics of data science and machine learning at a high level, without needing to learn how to code or cover complex mathematics. In this course you'll learn the fundamental concepts relating to data, allowing you to understand what makes data suitable for data analysis, visualization and machine learning. Then we'll give you a quick overview of important statistical topics, such as mean, standard deviation, and the normal distribution. Afterwards you will learn the different ways data scientists are able to visualize data to convey their ideas in a clear manner. We'll also teach you about the machine learning process, acquiring data, cleaning data, and an overview of the train/test split philosophy that supervised learning adheres to. Then we'll show you some examples of regression and classification algorithms, as well as how to evaluate their results. We'll also explore what the future holds by taking a peek at the bleeding edge of AI and ML, including DALLE-2 and GPT-3!

Who Should Attend?

This course is ideal for business professionals, analysts, managers, and anyone who works with data but does not have a technical background. If you want to develop confidence in using data to support your decisions, this training is for you.

Course Objectives

By the end of this course, you will have a solid understanding of data literacy fundamentals, enabling you to interpret and communicate data effectively. You'll learn to recognize different data types, identify patterns, assess data quality, and make informed business decisions. This course also covers basic data visualization techniques to help present insights clearly.

Prerequisites

No prior experience with data analysis is required. This course is designed for beginners and professionals looking to build foundational data skills.

Course Outline

Module 1: Data and Opportunities

- Data Quality

- Understanding Big Data

Module 2: Data Measurements

- Understanding Central Tendency
- Understanding Dispersion

Module 3: Understanding Data Analysis

- Tour of Data Visualizations

Module 4: Probability and Uncertainty

- Testing theories and hypotheses
- Probability and Statistics Overview

Module 5: Machine Learning Overview

- Understanding Machine Learning Concepts
- Supervised Learning Overview
- Unsupervised Learning Overview
- Dimensionality Reduction Overview

Module 6: The Future of Data, ML, and AI

- Overview of Deep Learning Concepts
- What's next for AI and ML