

Understanding Data Science and Data Literacy

Chapter 3: Data Science and Data Literacy · Topic 1

Key Concept

Data scientists collect data from various sources, clean it to remove errors, and then analyse it using statistical and computational methods to find meaningful patterns.

Data literacy means being able to read, understand, and critically evaluate data, including recognising misleading graphs or statistics that might be shown incorrectly.

Data is used to make informed decisions in fields like healthcare, business, and government, helping identify trends, predict outcomes, and solve problems more effectively.

Developing data literacy skills helps us become informed citizens and consumers, able to question and understand the data-driven claims we encounter daily.

Quick Revision Notes

- Data science involves collecting, analysing and interpreting data.
- Data scientists clean data to remove errors.
- Statistical and computational methods find patterns.
- Data literacy means understanding and using data effectively.
- Data literacy includes spotting misleading graphs or statistics.
- Data helps decisions in healthcare, business and government.
- Data helps identify trends and predict outcomes.
- Data literacy helps us evaluate data-driven claims.

Practice Questions

- 1 Find a graph in a newspaper or online and discuss if it's clear or misleading.
- 2 Discuss why cleaning data is important before analysis.
- 3 Research how data is used in healthcare.
- 4 Explain data literacy in your own words.
- 5 Discuss a decision that could be improved using data.
- 6 Create a simple chart from data you collect (like class survey results).