

What is Data Science?

PROMPT

Based on the videos and the reading material, how would you define a data scientist and data science? **(3 marks)**

Data Science:

1. Data science is something that data scientist do.
2. Data science is a way of extracting insights from large volumes of disparate data.
3. Data science involves drawing patterns from seemingly random structured and unstructured type of data.

Data scientists:

1. Data scientists are curious and analytical thinkers who use a variety of math skills not limited to Mathematics, Statistics and Probability to solve a problem.
2. They apply different available methods and algorithms to draw insights and conclusions from various kinds of data.
3. After applying data science methodologies, they are effective communicators and story tellers who can present their findings often to present new findings or confirm what was initially suspected.

PROMPT

As discussed in the videos and the reading material, data science can be applied to problems across different industries. Give a brief explanation describing what industry you are passionate about and would like to pursue a data science career in? **(2 marks)**

I am passionate about pursuing a data science career in the field of Machine Learning & Artificial Intelligence.

PROMPT

Based on the videos and the reading material, what are the **ten** main components of a report that would be delivered at the end of a data science project? **(5 marks)**

The 10 main components of a data science project report would be:

1. **Cover Page** with Author's name, contacts, affiliations if any and publication date
2. **Table of Contents** containing main headings, list of contents and figures
3. **Abstract / Executive summary** to explain gist of the report
4. **Introduction** to explain the topic to new readers
5. **Literature Review** including citations of authors and data sources
6. **Methodology** section to explain the research methods and data sources used for analysis

7. Detailed *Explanations* including **Results** and **discussion** sections
8. **Conclusions** which generalize findings and identify possible future outcomes.
9. **References**
10. **Acknowledgement** and **Appendices** (if Needed)