

## **What is Data Science?: P2P Assignment**

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

I believe a data scientist is somebody who finds the answers to questions through the analysis of data, and then visualises the data in a way that tells a story to the appropriate audience. In terms of Data Science, I believe it has now become a field that uses a wide range of tools to extract insights from data. For example, tools such as statistics, machine learning algorithms and many more.

**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?**

I am extremely passionate about professional sports, specifically football. This industry has now really started to boom due to teams embracing the power of data. For example, football had its own Moneyball owner called Matthew Benham who owns Brentford and FC Midtjylland. Both teams' successes since using data science has encouraged more teams to now use data to drive their player recruitment strategies. I would love to work in the scouting department for a professional football team and make my passion my career.

**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?**

The first component would typically be the cover page which would include; the title, the authors' names, the date of publication, and the organisation publishing the report. This would be followed by the table of contents which includes; the main key topics covered in the report and the page numbers, along with any graphs/figure locations. Next, you would expect to see the abstract which is essentially a short executive summary of the arguments detailed in the report. This would be followed by the introduction and literature review, which builds the context of the report, introduces the topic and the relevant research within the topic area. The literature review is concluded with the research questions and hypothesis of the report. Similarly, the methodology section introduces the methods that have been used throughout the research as well as the sources of data. The results section will follow where you are required to detail the findings of the report. The discussion is then used to discuss the findings and how they relate to the research within the area. It's also where you can explain why certain results may have happened. The conclusion is used to summarise the findings of the report. This is followed by the acknowledgments, reference list, and appendices.