TITLE

Abstract

Introduction
Provide a brief introduction to the topic and the context of the analysis.

Dataset selection
Describe the dataset you have chosen, including its source, size, and features. Explain why you chose this particular dataset for your analysis. Discuss any challenges or interesting aspects related to the dataset.

Task Definition / Formulating your Machine Learning problem
Clearly define whether you are tackling a Classification or Regression task. Justify why you have chosen this type of task based on the nature of the dataset and its features. Note that you could start by doing Exploratory Data Analysis (EDA) before deciding on a ML task.

Data Ingestion / Cleaning / Wrangling / EDA
What is the shape and type of the data? What variables does the data contain, etc. Explain how you handled missing values, duplicates, or unusual observations with a clearly reasoned approach. Remember that data cleaning is an iterative process that involves checking, correcting, transforming, and validating your data throughout your analysis workflow. Describe what the summary statistics tell you about the data.

Algorithm Selection
Choose a machine learning algorithm suitable for the selected task. Provide a brief explanation of the algorithm, including its strengths and weaknesses. Justify your choice based on the characteristics of the dataset and the requirements of the task.

Evaluation Metrics
Explain the choice of evaluation metrics used to assess the performance of your ML model. Discuss why these metrics are appropriate for your specific task and dataset.

Results and Discussion:
Present the results of your ML model evaluation. Discuss the performance of the algorithm and interpret the results. Consider any challenges encountered during the implementation and evaluation process. You could discuss the limitations in the dataset or the analysis, data collection, or actions based on your findings.

Conclusion
Summarize the key findings and insights from your analysis. Reflect on the success of the chosen algorithm and its suitability for the task. Suggest possible improvements or areas for future work.

References
Cite any external sources, papers, or libraries you used during your research and implementation.