

Weekly Progress Report

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Domain: Data Science

Date of submission: 04th Jun, 2024

Week Ending: 03

I. Overview:

This week focused on solidifying my statistical and probabilistic foundation, crucial for data analysis and machine learning applications.

II. Achievements:

1. Diligently progressed through the provided book on Probability and Statistics, grasping fundamental concepts like probability distributions, hypothesis testing, and statistical inference.
2. Leveraged the newfound knowledge to revisit initial data exploration findings from Week 2, applying statistical analysis techniques to gain deeper insights.
3. Continued data pre-processing tasks, addressing identified data inconsistencies and missing values using appropriate methods.
4. Explored relevant chapters in the data science book to bridge the gap between theoretical statistics and practical data analysis techniques.

III. Challenges:

1. Grasping some of the advanced statistical concepts initially presented a hurdle, requiring focused study and practice.
2. Integrating the newly acquired statistical knowledge with the ongoing project tasks demanded effective time management.

IV. Learning Resources:

1. The provided book on Probability and Statistics proved invaluable for building a strong foundation in statistical analysis.
2. The data science book continued to serve as a reference for practical data analysis applications of statistical concepts.
3. Continued exploration of online resources like Khan Academy for interactive tutorials on statistical concepts proved beneficial.

V. Next Week's Goals:

1. Continue applying statistical analysis techniques to further explore and understand the project data.
2. Based on project requirements and statistical insights, finalize the choice of relevant machine learning algorithms such as Linear Regression for model building.
3. Initiate the process of data preparation for machine learning, which may involve feature engineering and data transformation if necessary.
4. Begin familiarizing myself with the chosen machine learning algorithms through the provided book, online resources, and potential training sessions.

VI. Additional Comments:

Eagerly waiting to explore the next week section and its contents to gain a significant knowledge for my project progress.