ACENET

Microcredential in Advanced Computing ISP Report

**Project title: Cyber Attack Analysis**

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**Date:** July 31, 2024

**Abstract:**

This project analyzes a dataset of cyber-attacks to identify patterns and trends in attack types, distribution, and timing. The study aims to enhance cybersecurity strategies by providing actionable insights into prevalent threats.

**1. Introduction**

Briefly introduce the topic of your project. Explain the motivation behind your project and the problem you are trying to address. State the initial question that you are looking to answer, this is also known as the hypothesis or research question.

**2. Background**

Provide relevant background information on the topic.

**3. Analysis**

Describe the approach you took to complete your project. Explain where you found your dataset, and explain the dataset. Describe and justify the data preparation process. Describe your choice of analysis method (for example if you used ML, which model did you use and why). Describe how you used HPC for your project.

**4. Results**

Present the findings of your project. Use plots/graphs, figures, and tables to illustrate your results effectively. Explain what your results mean in the context of your initial question.

**5. Discussion**

Analyze your results and their implications. Discuss any limitations or challenges you encountered during the project.

**Conclusion**

Briefly summarize your main findings and conclusions. Restate the significance of your project. Suggest directions for future research based on what you found.

**References**

Include references to the sources for your data, background information, and previous studies used for your project.

**Supplementary Materials**

* GitHub Repository: [fatemaalasbahi/Cyber\_attack\_analysis (github.com)](https://github.com/fatemaalasbahi/Cyber_attack_analysis)