TSP- AI ML Fundamentals (Capstone Project)

PROJECT TITLE

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OUTLINE

Problem Statement (Should not include solution)

Proposed System/Solution

Algorithm & Deployment

GitHub Link

Project Demo(photos / videos)

Conclusion

Future Scope

References

Problem Statement

e ever-increasing volume of spam emails poses a significant challenge for er
ers and organizations alike. Spam disrupts workflow, consumes valuable stor
ace, and can expose users to phishing scams, malware, and other security ri

Current spam filtering methods, often rule-based, struggle to keep pace wit
evolving spam tactics employed by spammers. These tactics include:

Sophisticated content: Spammers use dynamic content, obfuscated text, an
images to bypass traditional filters.

Personalized attacks: Spam emails are increasingly targeted towards specifi
individuals, making them appear more legitimate.

Evolving techniques: Spammers constantly develop new methods to bypas
existing detection mechanisms.

his necessitates a more intelligent and adaptable approach to spam detecti

Proposed Solution

Problem: Spam emails flood inboxes, wasting time, storage, and posing security ris
Current methods struggle to keep up with evolving spam tactics.

Solution: We propose an AI & ML powered spam detection model. This model wil

Be trained on a massive dataset of labeled emails (spam and legitimate).

Analyze email features like text content, sender info, and attachments.

Continuously learn and adapt to identify new spam tactics.

Benefits:

Higher spam detection accuracy.

Adaptability to combat evolving spam techniques.

Reduced user burden with less spam in inboxes.

Enhanced security by filtering out phishing attempts.

Algorithm & Deployment

Algorithm:

Briefly list chosen ML algorithms (e.g., Naive Bayes, SVM).

Highlight their strengths for spam detection (e.g., text data efficiency).

Deployment:

Depending on your project, choose one or more options:

Standalone app for spam classification.

API for email service provider integration.

Cloud deployment for scalability.

GitHub Link

https://github.com/vinith751/NM-PROJECT-SPAM-EMAIL-DETECTING

Project Demo(Recorded Video)

Conclusion

Success: Our AI & ML model achieved a high [mention accuracy/precision/recall/F1 score] in identifying spam emails. This significantly reduces user burden and enhances security.

e Future: We plan to explore further improvements like [mention spec areas] and integrate the model for real-world impact.

Overall: This project demonstrates the power of AI & ML in combating spam, leading to a more secure and productive email experience.

Future Scope

The war on spam continues! Here's what's next:

Advanced AI: Use even stronger models to outsmart spammers.

Adapting to Change: Train the model to stay ahead of new spam tricks

Beyond Spam: Detect phishing attempts and harmful content.

Wider Reach: Handle spam in multiple languages.

Real-World Use: Integrate the model for wider impact.

These future steps will make your AI & ML spam fighter even more po

References

1.Project Github link,M.VINITH,2024

2.Project video recorded link github,M.VINITH,2024

3.Project PPT & Report github link,M.VINITH,2024

THANK YOU