

INTERNSHIP PROGRAM ARTIFICIAL INTELLIGENCE







DURING YOUR INTERNSHIP TENURE,

IT IS IMPORTANT TO KEEP IN MIND THE FOLLOWING POINTS

 $\langle 1 \rangle$

Enhance Your Professional Presence

- Update your LinkedIn profile.
- Share achievements such as your offer letter or internship completion certificate.
- Mention and tag Hunar Intern Company in your posts.
- Use hashtags like #HunarIntern, #HunarTech, #HunarCompany to showcase your affiliation.

 $\left(2\right)$

Maintain Academic Integrity

- Respect intellectual property.
- Avoid plagiarism and copying code.
- Understand that violations can lead to the termination of your internship and subsequent restriction from future opportunities with us.

3

Demonstrate Your Work

- Share a video showcasing the completion of your tasks on LinkedIn.
- Tag Hunar Intern Company in your post.
- Use relevant hashtags like #HunarIntern,#HunarTech,#Hunar Company to engage with our community.

4

Engage with the Community

- Participate in company events and activities.
- Connect with fellow interns and colleagues.
- Join and contribute to discussions on company forums and social media Groups



- Create a new GitHub repository with the name Hunar Intern and upload your task on it.
- Create a professional video showcasing your internship projects and Achievements
- Host the video on LinkedIn to provide proof of your work and establish credibility among your peers. Consider tagging hunar intern in your posts to ensure they are notified of your work.
- A SUBMISSION FORM will be shared later. Till then please continue your task and make a separate file of each level.
- When posting the video on LinkedIn, include the following hashtags to maximize visibility and engagement: #hunarintern #hunarTech. Additionally, depending on your Internship Domain

SUBMISSION





Spam Email Detector

TASK: 3

LEVEL: Challenging







Develop a spam email detector using machine learning to classify emails as either spam or non-spam (ham).using naive bayes and support vector machine.





REQUIREMENTS

Basic understanding of python libraries and appropriate model.

Jupyter Notebook or any Python environment.





STEPS TO FOLLOW

1

Import libraries and dataset:

- Import necessary libraries like pandas.
- Gather a labeled dataset containing examples of both spam and non-spam emails. Datasets like the Enron Email Dataset or the SpamAssassin Public Corpus can be useful and import it.

2

Data preprocessing:

- Remove null values and duplicates from the dataset.
- Split the dataset into training and testing data.

3

Implement Model:

Select a suitable classification model for spam detection. Naive Bayes and Support Vector Machines (SVM) are often used for this task due to their effectiveness and train the model using training dataset.

GUIDELINES



Model Evaluation:

Evaluate the model on the testing set using metrics such as accuracy, precision, recall, and F1 score. These metrics help assess the model's ability to correctly classify spam and nonspam emails.

Testing:

Test your model by different datasets.





What You'll Learn:







Developing models based on real world problems.



ADDITIONAL SUGGESTIONS(OPTIONAL):

Regularly monitor the performance of your spam detector.

As spammers Adapt their techniques, update your model with new labeled data to ensure its effectiveness over time





CONCLUSION

It's a practical project that introduces key concepts in machine learning and classification problems. By combining machine learning with rule-based approaches, this project aims to provide an effective tool for identifying and filtering out spam emails, contributing to improved email security and user experience.



