

# MAIL CONTENT FILTERING USING MACHINE LEARNING ALGORITHMS IN BIG DATA ENVIRONMENTS

<sup>1</sup>Valarmathi.N, <sup>2</sup>Aadhipriya.E, <sup>3</sup>Deepika.N, <sup>4</sup>Epsiya.V, <sup>5</sup>Nagalakshmi.A

## ABSTRACT

*Email spam is operations that send different email clients to undesirable messages. Email spam is one of the problems for every individual. email spam is adware for any company/product or any type that receives any notification without an email client mailbox. The spam filtering techniques were used to solve these kinds of problems. Thus the spam filtering technique will protect or mailbox from spam mails. Here, we use the Support Vector Machine it is a Classifier structured as three-layered frameworks that include bulk emails for spam classification for obfuscator, classifier, and anomaly This Support Vector Machine is so simple and highly efficient method for spam. Here we will use the classification of spam and non-spam emails for real-time. The extraction technique consists of features such as it is used to extract the features of the digestive that is based on the bucket. So that the result of this system is to increase and implementing the Self-Acknowledgeable Intranet Mail System that had been designed and it is made for the benefit of the status of the sender. When the mail is sent, the recipient's activity is known by the sender until the mail system is reviewed. And at last, here we provide a pop-up window it is used to identify the spam emails at the time of the mail content.*

**KEYWORDS:** Visual Studio, Mobile internet

## I. INTRODUCTION

Reporting complaints such as transportation, EB, and water problems all the citizens. They have to undergo a long procedure and formalities to report such situations as drainage, road damage, infrequent water supply, etc. In other words, everything that comes under the surveillance of public places. Though there is no guarantee that the complaints that have reported will be resolved by the authority concerned. So that the complaints are generally not listed, unanswered, and generally unresolved because the company is Reporting complaints such as transportation, EB, and water problems that have been no longer as an easy process for citizens. So that they must undergo a long procedure and formalities to report such situations as drainage, road damage, infrequent water supply, etc. Also, everything that comes under the surveillance of public places. There is yet no guarantee that the complaints reported will be resolved by the authority concern. So that the complaints that are generally not listed to, not answered, and generally not resolved because the company is excessively very large to worry about even little complaint from a single person. To facilitate this kind of complaining

---

<sup>1</sup> AP/IT, M.Kumarasamy College of Engineering, Karur.

<sup>2</sup> UG-Student, Department of Information Technology, M.Kumarasamy College of Engineering, Karur.

<sup>3</sup> UG-Student, Department of Information Technology, M.Kumarasamy College of Engineering, Karur.

<sup>4</sup> UG-Student, Department of Information Technology, M.Kumarasamy College of Engineering, Karur.

<sup>5</sup> UG-Student, Department of Information Technology, M.Kumarasamy College of Engineering, Karur.

procedure, this project is to implement an android application that lets citizens report problems with infrastructure in their city to the relevant So whenever people come across any defects in the city's infrastructure, emergencies or any daily life disturbances, they can share, discuss and get resolved the problems by the concerned authority utilizing this complaint app using GPS location tracking. This app is used to resolve the problem and the user provides the ratings based on authority performance. There is no need to post the complaints individually. All complaints automatically forward to the concerned authority based on user locations.

Finally, provide intimation about complaints to worry about one little complaint from a single person. To facilitate this complaining procedure, this project is going to implement an android application that lets citizens report problems with infrastructure in their city to the relevant So, when people come across any defects in the city's infrastructure, emergencies or any daily life disturbances, they can share, discuss the problems get resolved by the concerned authority utilizing this complaint app using GPS location tracking. This app is used to resolve the problem and the user provides the ratings based on authority performance. There is no need to post the complaints individually. All complaints automatically forward to the concerned authority based on user locations. Finally, provide intimation about complaints.

## **II. RELATED WORK**

Several kinds of research and techniques have been proposed to complain portal system S. Anjali et al. [1] have proposed a complaint management system is used to gathering Call Registration about the issues to provide services. It is a web-based application and it is designed to keep track of complaints that will be registered by the college department/lab staff, so this system needs to have a distributed platform-independent web application. Melina Fernandez et al. [2] have proposed a complaint management system based on Android. Active citizen involvement can occur when an MC solves their problems and complaints. These government agencies are often called MC (Municipal Cooperation). This is practically possible only with the installation of sensors or cameras or allowing citizens to approach them. Devika Radhakrishnan et al. [3] provide an intelligent management system based on this application to simplify the complaint about the relevant community and make it more accessible and cheaper. This page gives you a basic idea of how to register your complaint and check the status of your complaint, whether your complaint has been resolved, and show you how to make a complaint. Pritam Tandel At. [4] Discussed the model of complaint management system using Android architecture. The site will have a mobile phone where users can submit their complaints and check the status of their complaints.

These are the techniques required:

- 1.Social Filter architecture framework
- 2.Support Vector Machine (SVM)
- 3.Structured abstraction generation
- 4.FP-Tree construction

## **III. EXISTING SYSTEM**

With the system in place, must visit the office with a written complaint. Depending on your priorities, complaints

can be filed in the box or directly to the commissioner or department concerned and may take time and effort. With this system available, no one can accept the complaints received. A solution warranty is provided through oral communication. So, this is not intended to solve the problem. Because complaints are an important source of information for improving the basic services and living conditions of our city. Residents may have complaints about the environment and their urban environment, but may not like the traditional grievance process, which they must go through, such as going to the office and staying there for a while. monitor their time and effort. So, to bridge this gap, we have created an online service that provides a perfect platform for sharing problems between service organizations and the public in two words that citizens will use in this way. it is best not to inform them of their origin. steps and details.

### DISADVANTAGES

Difficult to handle the flood of emails. Email content may be revealed by the third person. Time complexity can occur. Accuracy is less

### 3.1 ARCHITECTURE OF EXISTING SYSTEM



**Fig.1: Diagram denoting the existing system**

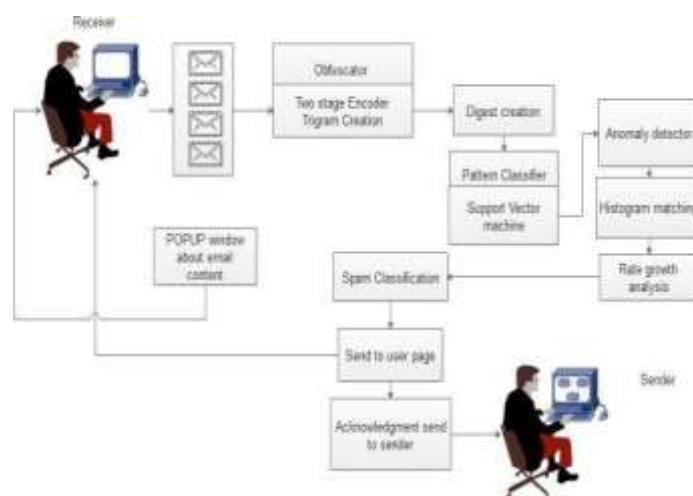
## IV. PROPOSED SYSTEM

This proposed system will save people time by initiating the complaint directly with the help of the proposed system. They don't have to go to the government office to start complaints. People can solve their problems / posting directly on the specific system and people can post their suggestions. The proposed system currently has the following functions: 1. People can initiate complaints from anywhere with the help of mobile devices. 2. People can copy images. 3. GPS functions for users to easily monitor their location and their complaint and check the status of their complaint. A. Functional modules: The whole process is divided into four modules. They are,

- 1.Registration or login module.

- 2.Complaint module.
- 3.Report module.
- 4.Rating module.

## 4.1 ARCHITECTURE OF PROPOSED SYSTEM



**Fig.2: Diagram denoting the proposed system**

## 4.2 ADVANTAGES

In the world of technology, this system helps people make complaints with the help of cell phones. Reduce the time and effort to get complaints by making online complaints. We can follow the pattern of our complaint. That is, we can follow whether they have been rejected, Waiting, processed about their complaint. The individual logging feature for all users and employees, you can see the full extent of the complaint and resolve

## V. PROBLEM DESCRIPTION

Spam is unwanted data so we can do it for you. You should use this spam to send unsolicited large messages before an unquestionable set of search results for advertising purposes. Spam — these spam messages not only increase web browsing and memory space but can be used by any opposition. Here is what we have to say to make a difference. Spam emails are return times when the recipient does not want to receive it. So that the service may get rejected. An email server receives huge traffic from the spammers, so, there arises a delay of legal messages to be reached by the targeted recipients. We need to know that we can get it, and you can do so with your password. A very difficult task is dealing with spam and Classic time. This problem cannot be handled by a single model, because of that a new spam is continuously evolving and these are frequently configured and so they are not detected by furthermore hindrance to accurate detection. Spam doop is a platform that can be multiple for collaborating on the faster detection of bulk spam campaigns. In that case, you need to click on the Snapshot, then we need to return to content. The best thing you can find is that we are looking for something. Eventually, give the email recognition system to identify the recipient's visual status with the pop-up windows for email content.

## VI. FUTURE IMPLEMENTATION

In the future, we can extend the framework to implement various classification algorithms with multiple datasets. The email tracking system can improve the accuracy results in real-time environments.

## VII. CONCLUSION

The e-mail is an efficient, fast, and it is also a low-cost approach. Email Spam is that the unsolicited data sent within the mailboxes. Spam might be a large disadvantage for users and ISPs. In today's investigation, a user receives plenty of spam emails. To avoid those irrelevant emails, we would like effective to perform some spam filtering strategies. This spam messaging unit is used for spreading the virus, for banking the fraud, for publishing and advertising. Spam messages are a large problem for many persons as they gather their mailboxes and waste their time for deleting all trash messages before reading them. It also costs money for persons through dial-up connections, bandwidth, and space. The Bayesian classifier is one which is the most important and widely used one, and it is also the best method of classification thanks to its chip handling capabilities for the one among the associated problems through the user. Categorization conclusion and during this project, we have implemented the analysis system of every e-mail. Using a privacy-based system allows the digest system to encrypt the emails. In our upcoming years, we have an idea for implementing another algorithm for our classification method to satisfy the usability of the persons and to realize better performance.

## RESULT ANALYSIS

This project deals with spam messages in email and shows pop-up notification denoting whether we received spam messages or not. And sender knows whether the receiver reads the message.

## REFERENCE

1. Caruana.G, Li.M, and Qi.M. A MapReduce based parallel SVM for large scale spam filtering. In International Conference on Fuzzy Systems and Knowledge Discovery (FSKD), volume 4, pages 2659–2662. IEEE, 2011.
2. Crawford.M, Khoshgoftaar.T, Prusa.J. “survey of review spam detection using machine learning techniques”. Journal of Big Data, Vol. 2:pages 23, 2015.
3. Dinh.S, Azeb.T, Fortin.F, Mouheb.D, and Debbabi.M. Spam campaign detection, analysis, and investigation. Digital Investigation, vol. 12: pages 12–21, 2015.
4. Fontugne.R, Mazel.J, and Fukuda.K. Hadoop: A MapReduce framework for network anomaly detection. In Computer Communications Workshops (INFOCOM WKSHPS), pages 494–499. IEEE, 2014.
5. Francois.J, Wang.S, Bronzi.W, State.R, and Engel.T. Botcloud: Detecting botnets using MapReduce. In IEEE International Workshop on Information Forensics and Security (WIFS), pages 1–6. IEEE, 2011.
6. Goldstein.M and Dengel.A. Histogram- based outlier score (HBOS): A fast unsupervised anomaly detection algorithm. KI- 2012: Poster and Demo Track, pages 59–63, 2012.
7. Kornblum.J. Identifying almost identical files using context triggered piecewise hashing. Digital investigation, vol. 3 Pages 91– 97, 2006.

8. Sirivianos.M, Kim.K, and Yang.X. Socialfilter: Introducing social trust to collaborative spam mitigation. In INFOCOM, pages 2300–2308. IEEE, 2011.
9. Sheikhalishahi.M, Saracino.A, Mejri.M, Tawbi.M, and Martinelli.F. Fast and effective clustering of spam emails based on structural similarity. In International Symposium on Foundations and Practice of Security, pages 195–211. Springer, 2015.
10. Tseng.C, Sung.P, and Chen.M. Cosdes: A collaborative spam detection system with a novel e-mail abstraction scheme. IEEE Transactions on Knowledge and Data Engineering, vol. 23: pages 669–682, 2011.