

Filtering System for OSN User Wall

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Abstract- The basic issue in day today On-line Social Networks (OSNs) is to give users the ability to manage the messages posted on their own private space to avoid that unwanted text or image is displayed. Till date OSNs provide small support to this need. In this paper, we propose a system allowing OSN users to have a direct control on the contents posted on their social network walls. This is done by a flexible rule-based system, that allows users to update the filtering criteria for applying on their walls, and a Machine Learning based soft classifier automatically labeling contents in support of content-based filtering.

Keywords- Online Social Networks, rule based system, Machine learning, content based filtering, rule based filtering.

I. INTRODUCTION

Computer, network, internet are the very important terms for today's human life. Today each and every person uses the online networking sites for communication purpose and they play an important role in human life. But, this social networking website is also responsible for different types of crimes or illegal activities.

Today no one has the time to communicate with one another and human life is totally depends on internet. No one has time to sit with their family members and talk for few minutes. In such situation one interactive media is available, this is called the online social networks that play a very powerful role for creating beautiful relation between people.

There are several social networking sites available such as Orkut, Facebook, twitter and many more[1]. The people who away from us also talk with us by using this social networking websites and interact with more and more people.

Each OSN can provide the personal and social space for each user where he/she can post or share their messages, photos, comments and many more things[2]. But sometimes the huge number of message collection is created and in this situation we need to avoid unwanted messages.

In this paper, we introduce various techniques that help to avoid unwanted messages and provide little more security techniques. With the help of such different techniques, we can manage the messages on user wall and also manage our account[3].

The techniques are machine learning techniques that help to filter the messages. In this paper we also use content based filtering and policy based filtering.

II. LITERATURE SURVEY

The previous system provides the security of removing unwanted messages, but this is in very less amount. In previous system, they filter the unwanted messages on the basis of person-based filtering. To avoid illegal messages blacklist also used. If we can compare the previous system and proposed system then, there is a lot of difference between both.

2.1.Present Work

The aim of present work is to impose and experimentally implement the system that filters unwanted messages and this is called FILTERING WALL. We can also use Machine Learning Technique for assigning short text message a set categories based on its content[4]. The following are the some techniques used to implement the present system:

2.1.1 Content Based Filtering

Information filtering system is based on dividing the stream for applying filtering criteria. In content based filtering, each user is assumed to operate independently[5]. As a result, content based filtering select information items based on the correlation between the content of item and user preferences as opposed to collaborative filtering.

2.1.2 Policy-based filtering

In policy based filtering system, users filtering capability is represented to filter wall messages according to filtering criteria of the user[6]. Twitter is the best example for policy based filtering. In that filtering policy can be defined between two communicating parties.

2.1.3 Filtering wall architecture

The filtering wall that we designed for implementation of authorized access and that's implemented by using three layers that are following, as shown in figure 1,

- A. Social Network Manager
- B. Social Network Application
- C. Graphical User Interface

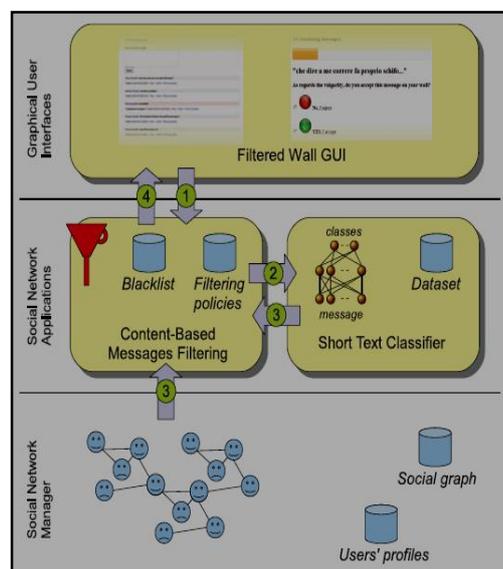


Fig 1. Architecture of filtering wall

2.1.4 Social Network manager

In this layer we aim to provide the basic services or basic OSN functionality (i.e. profile and relationship management).

2.1.5 Social Network Application

In this the second layer is include external interfaces. This layer include to connect with another user[7]. The social network application layer provide network interfaces. This layer is middle layer of our system.

2.1.6 Graphical User Interface

This layer helps to implement both two layers. The graphical user interface is the front end of our project. The Graphical User Interface include all user related operation.

III. MACHINE LEARNING TEXT CATEGORIZATION

The machine learning text categorization is classified into two categories[8], First is binary based categorization that labels the messages as neutral and non –neutrals. The second level classifier performs a soft-partition of non-neutral messages assigning a given messages a gradual membership to each of the non-neutral classes.

IV. WORKING MODULE

4.1 Content setting using filtering rule

The system provides e powerful filtering rules by which user can set what content should be displayed on their walls and which should not.

4.2 Message visibility

For each message the user tells the system decision to accept or reject the message.

4.3 Blacklist

Blacklist managed directly by the system which is to avoid the messages from undesired people. In our system we also provide authority for user to see the blocked messages.

V. RESULT

ONLINE SOCIAL NETWORK APPLICATION Welcome [suresh@gmail.com](#)

Messages Blocked Messages Profile Info My Friends Filter Criteria List Logout

Enter Your Comment

attack nation by bomb blast

Your message has been blocked by **SYSTEM ADMIN!**

Class Name	Matched Keys	Percentage
Voilence	attack , bomb , blast	75%

Fig 2. Blocked content

The above figure 2 shows how much the message or word matches with unwanted words that are stored in a database. And we got expected result message is block and stored in blacklist are calculated by using Short text classifier that shows division of message into words and matching percentage, that is 75%, gives machine learning techniques.

CONCLUSION

In this paper, we are developing a system which filters unwanted messages from osn wall. In previous system, we have certain disadvantages we are using only content-based filtering and ruled-based filtering where message posted on wall no matter who post them. but in current system, we provide policy based personalization and also content based filtering by using neural network methods. We use machine learning algorithm for short text classification of messages. We also provide facility that user set its criteria for friend request. We provide matching of message with database words and block those messages if matching. We also display how much percent message match with database word collection.

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