

A Filtering Dispensable Messages From Social Networking Sites User Walls

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ABSTRACT

In the recent few years increase in popularity of online social networks has attracted lots of attention. Users of social networks wants ability to control messages posted on their private space to avoid unwanted contents displayed. Up to now current social networks provides little support for this need. So in this paper, we purpose a system that allows users of social networks to have direct control on messages posted on their walls. This is done with the help of a flexible rule based system that allows users to modify the filtering criteria to be applied on their walls, and a machine learning based short Text Classification and Blacklist techniques are applied on user walls. It provides security to user cause there may be possibility of spamming.

Keywords- Data Mining, Online Social Networks, , Filtering information, Filtered Wall , Content Based Message Filtering, Short Text Classifier.

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I. INTRODUCTION

The aim of experimentally evaluate the automated system is called as Filtered wall. Machine-Learning text classification techniques are automatically assign with each short text message a set of categories based on its content. The major efforts building a robust short text classifier are concentrated in the extraction and selection of a set of characterization features. We base the overall short text classification strategy on Radial Basis Function Networks for their prove capabilities in soft classifiers, in managing noisy data. The system provides the support for user-defined Blacklists, list of users that are temporarily restrict to post any kind of messages on user wall.

The architecture of social networking sites services is a three-tier structure. The first layer is Social Network Manager is to provide the basic functionalities. The second layer support for Social Network Applications. The third layer is their Graphical User Interfaces. The proposed system is placed in the second and third layers. User interact with the system by means of a GUI to set up and manage their filtering rules and blacklists, the GUI provides users with filtered wall i.e. a wall where only messages that are authorized according to their filtering

rules and blacklists are published. The core components of the proposed system are the Content-Based Messages Filtering and Short Text Classifier modules. It classify messages according to a set of categories. The first component exploits the messages categorization provided by the short text classifier module to enforce the filtering rules specified by the user. Blacklists can also be used to enhance the filtering process the path followed by a message. Users have ability to keep in touch with his/her friends by exchanging different types of information or messages like text, audio and video data. Today's OSNs (Online Social Network System) do not provide much support to the users to avoid unwanted messages displayed on their own private space called in general wall. . So we present OSNs system which gives ability to users to control the messages posted on their own private space to avoid unwanted messages displayed. Customizable Filtering Rules are used to filter the unwanted messages from OSNs users wall as well as Machine learning approach, Short Text Classification and Black list techniques are applied on Users Wall.

II. LITERATURE SURVEY

Now a day's, the first concerns the extraction and selection of contextual features that have been shown to have a high discriminative power. The second task includes the learning phase. As the underlying domain is dynamically changing the collection of pre-classified data may not be representative in the long term. The present batch learning strategy based on the preliminary collection of the entire set of labelled data from permitted an accurate experimental evaluation but needs to be developed to include new operational requirements. We plan to address this problem by investigating the use of on-line learning paradigms able to include label feedbacks from user future work. Filtering is based on explanations of individual or group information that typically represent long term interests. Users get only the data that is extracted. Information filtering systems are intended to categorize a stream of dynamically generated information and present it to show the similarity between information filtering and information retrieval. As far as privacy is concerned and current work is mainly focusing on privacy preserving data mining skills i.e. protecting information related to the network and present it to the user. In this paper they have discussed about Filtering is based on explanations Of individual or group information preferences that typically represent long-term interests. Users get only the data that is extracted. Information filtering systems are intended to categorize a stream of dynamically generated information and present it to the user those information that are likely to satisfy user requirements. Feedback using previous related abstracts provided an efficient and simple way of demonstrating people's interests. The main contribution of this is the design of a system providing customizable content-based message filtering for OSNs, based on ML techniques. Our work has relationships both with the state of the art in content-based filtering, as well as with the field of policy-based personalization for OSNs and, more in general, web contents. A distinction is made between two types of text filtering systems: content-based and social filtering systems. In content-based systems, filtering is done by exploiting the information extracted from the text of documents. In social filtering systems, documents are filtered based on annotations made by prior readers of the documents. We use social features of the users to identify the ones who are more likely to post relevant content, however it is different from the social filtering systems where other users' feedbacks are used. In the OSN domain, interest in access control and privacy protection is quite recent.

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next to the text of documents. We use social features of the users to identify the ones who are more likely to post relevant content, however it is different from the social filtering systems where other users' feedbacks are used. We believe that this is a key OSN service that has not been provided so far. Indeed, OSNs provide very little support to prevent undesired messages on user walls. For example, Facebook allows users to state who is allowed to insert messages in their walls (i.e., friends, friends of friends, or defined groups of friends). However, no content-based preferences are supported and therefore it is not possible to prevent undesired messages, such as political or vulgar ones, no matter of the user who posts them. Providing this service is not only a matter of using previously defined web content mining techniques for a different application, rather it requires to design ad-hoc classification strategies. This is because wall messages are constituted by short text for which traditional classification methods have serious limitations since short texts do not provide sufficient word occurrences.

The main contribution of this is the design of a system providing customizable content-based message filtering for OSNs, based on ML techniques. Our work has relationships both with the state of the art in content-based filtering, as well as with the field of policy-based personalization for OSNs and, more in general, web contents.

III. FIGURES GRAPHS AND TABLES

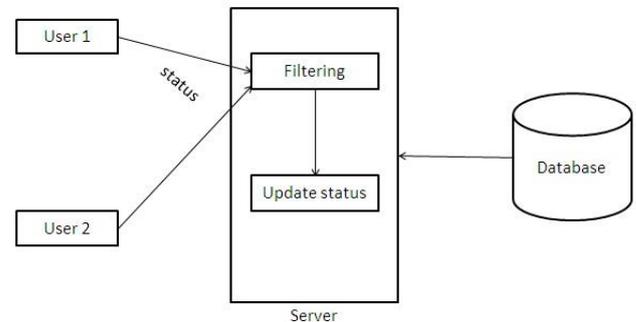


Fig. 1 Block diagram of the system

1. User can enter the account and upload the status.
2. Filtering the status using short text classifier and content based message filtering and filtering rules.
3. Uploaded status can check with database.
4. Update the status.
5. Administrator can send the message to the user.

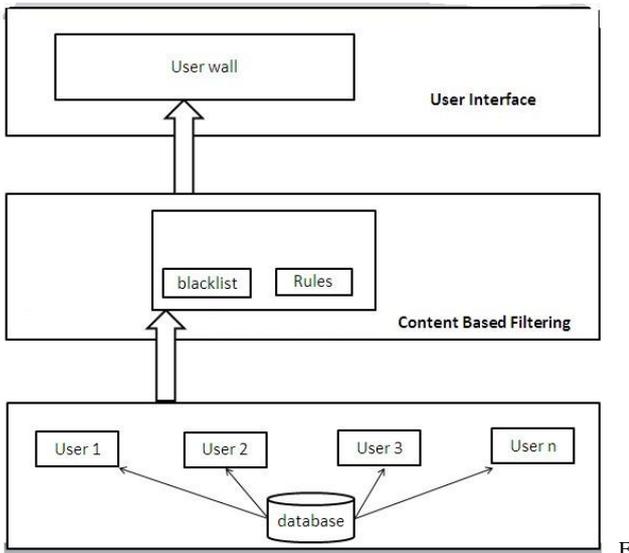


fig. 2 Architecture Diagram for Navigation Pattern Discovery

The core components of the proposed system are the Content-Based Messages Filtering (CBMF) and the Short Text Classifier modules. The latter element aims to categorize messages according to a set of categories. In compare, the first element exploits the message categorization offered by the STC module to implement the FRs specified by the user. In contrast, the first component exploits the message categorization provided by the STC module to enforce the FRs specified by the user. BLs can also be used to enhance the filtering process.

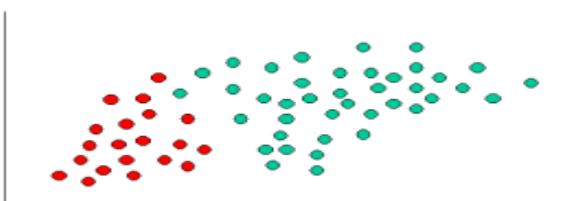
1. After entering the private wall and the user tries to post a message which is intercepted by filtered wall.
2. A Machine Learning based text classifier extracts data from the content of the message.
3. Filter Wall uses data about data provided by the classifier, together with data extracted from the social graph and user profiles, to enforce the filtering and blacklist rules.
4. Depending on the result of the previous step the message will be filtered by filter wall.

IV.IMPLEMENTATION WORK

Algorithm

Naïve Bayes:

To demonstrate the concept of Naïve Bayes Classification, consider the example given below:



As indicated, the objects can be classified as either GREEN or RED. Our task is to classify new cases as they arrive, i.e., decide to which class label they belong, based on the currently exiting objects.

Since there are twice as many GREEN objects as RED, it is reasonable to believe that a new case (which hasn't been observed yet) is twice as likely to have membership GREEN rather than RED. In the Bayesian analysis, this belief is known as the prior probability. Prior probabilities are based on previous experience, in this case the percentage of GREEN and RED objects, and often used to predict outcomes before they actually happen.

Thus, we can write:

Prior Probability of GREEN: $\frac{\text{number of GREEN objects}}{\text{total number of objects}}$

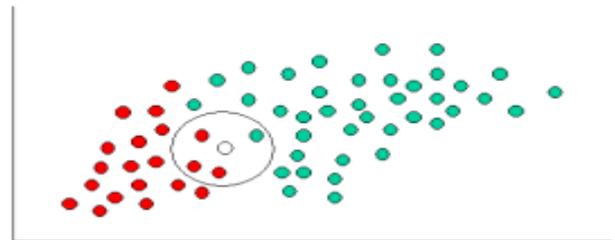
Prior Probability of RED: $\frac{\text{number of RED objects}}{\text{total number of objects}}$

Since there is a total of 60 objects, 40 of which are GREEN and 20 RED, our prior probabilities for class membership are:

Prior Probability for GREEN: $\frac{40}{60}$

Prior Probability for RED: $\frac{20}{60}$

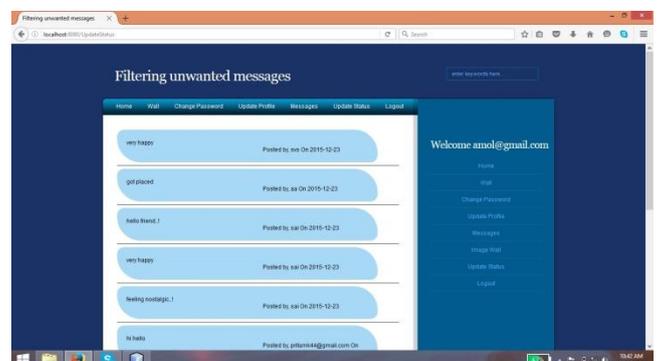
Having formulated our prior probability, we are now ready to classify a new object (WHITE circle in the diagram below). Since the objects are well clustered, it is reasonable to assume that the more GREEN (or RED) objects in the vicinity of X, the more likely that the new cases belong to that particular color. To measure this likelihood, we draw a circle around X which encompasses a number (to be chosen a priori) of points irrespective of their class labels. Then we calculate the number of points in the circle belonging to each class label. From this we calculate the likelihood:



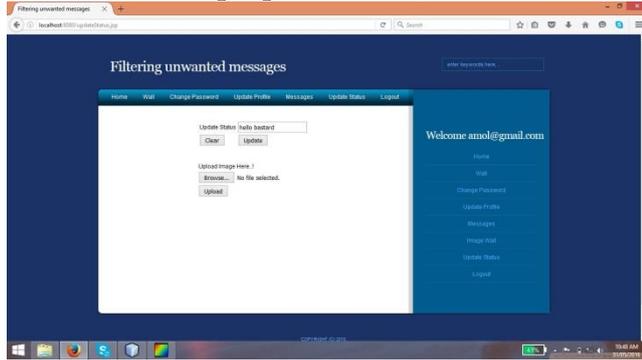
$$\text{Likelihood of } X \text{ given GREEN} \propto \frac{\text{Number of GREEN in the vicinity of } X}{\text{Total number of GREEN cases}}$$

$$\text{Likelihood of } X \text{ given RED} \propto \frac{\text{Number of RED in the vicinity of } X}{\text{Total number of RED cases}}$$

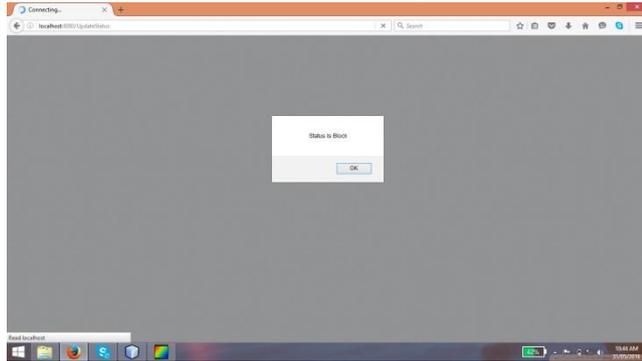
1.status uploaded successfully.



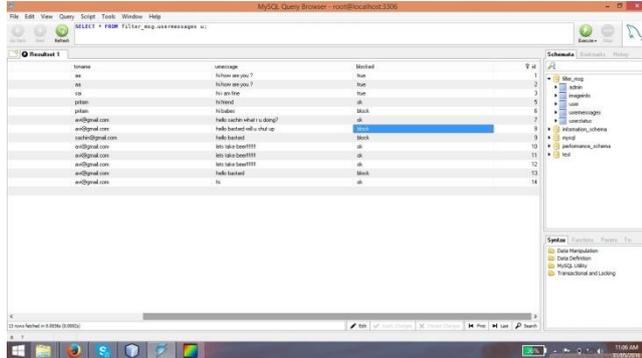
2. Status with improper words.



3. Status Blocked



4. Admin Database.



V. CONCLUSION

In this paper we are going to give a clear view of this application is useful for common people who don't want to write any unwanted messages like vulgar, political messages on his/her own wall by any third person. All activities are happen with some famous personalities, so if this facility will provide with OSN sites then people can protect his wall from this type of malpractices.

VI. FUTURE SCOPE

Future work on this study comprises of more refined techniques and our contribution we enhance the system by creating a instance randomly notifying a message system that should instead be blocked, or detecting modifications to profile attributes that have been made for the only purpose of defeating the filtering system. Automatically user will get

a mail notification. We will work on filtering posted audio and video messages.

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