

Unwanted Message Filtration from OSN User's Wall and Blocking of Unwanted Person Using Trust Value

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Abstract—

Nowadays Social networking sites are very popular. It has become a routine for individuals to keep checking messages on their online social wall. Social Networking sites often are best entertainment for youngsters. Online social network helps you to connect with your family, friends, & society to share your views on any topic. As social networking sites are open for all, anyone can post message on their own wall or others wall. Sometime people posts inappropriate messages on others wall which annoys people viewing them. Considering this problem my paper work is for filtering OSN wall messages before they reach to the user's wall and determine trust related to people on OSN. As OSN messages are short for that I use Short text classification method with trust calculation

Keywords— Online social network (OSN), Short text classification, Trust, Message Filtering

I. INTRODUCTION

Social network is interactive medium to share and communicate some amount of data related to human life. OSN is used to share some content type. It could be image, text, video and audio. It is platform to build relationship among people who are interested in sharing views, picture, real time connections and texts.

Social network provide various types of services such as profile, social links. It allows you to create a list of user with whom you want to communicate, to create a public profile and view the connections within system.

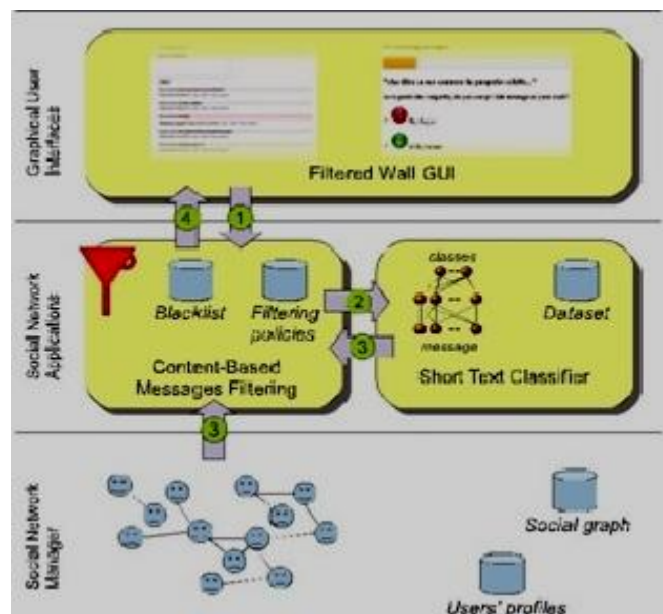


Fig.1: General Architecture of online Social Network

Given architecture is three-tier architecture [5]

- First layer is called as Social Network Manager (SNM)-It aims to provide the basic Functionalities (i.e.) profile and relationship management.
- Second layer provides support for external Social Network Applications(SNAs)
- Third layer is Graphical user interface (GUI)-With the help of GUI user can interact with the system.
- Filtering-It is used to filter the unwanted messages using blacklists
- Content Base filtering-It is used to select information based on the correlation between the content of the item and user performances.

Some of the social network sites are Twitter, Facebook, YouTube which are used worldwide. A social network can be defined as a set of factors and ties among them. Web mining is used to discover useful and related information from a large amount of data. Online social network information filtering can be used for a different purpose in OSN anyone can

post on OSN wall as well as on others wall. With the help of information filtering user can able to control the messages written on their own wall by filtering out unwanted messages.

Currently OSN provides very less support to prevent not required messages on users wall for e.g. Facebook allows users to decide who is allowed to insert messages on their wall (i.e. Family members, friends, group of friends, friends of friends) However no-content based preferences are supported and hence it is not possible to prevent undesired messages such as vulgar or political one no matter who post them on the wall.

II. RELATED WORK

As a web browsing growing continuously, it becomes difficult to search for relevant information using traditional search engines. Topic related search provides you an alternate way to support efficient information retrieval on web by providing customized and more precise search in various domains. However developers of topic specific search engines need to address two issues:-

1. How to find URLs on the web
2. How to filter out irrelevant document from a set of documents gathered from the web

Second issue in this paper reports my research. I am using a machine learning approach that combines web structure and content analysis.

We can use various web Text filtering approaches

1. Benchmark approach
 - A. Lexicon based approach
 - B. Keyword base approach
2. Content base filtering approach [1]

M.Chau in his paper talks about two benchmark approaches [4]

A. Lexicon based approach: It has the advantage of being fast and has been used in various information retrieval applications. Threshold divides these documents into two classes related and irrelevant. This threshold was then used for testing.

B. Keyword based SVM approach: This approach tells that, in the processing stage every single document was first tokenized into single words, because system will not bear a significant semantic means a, an, the get fixed base on the predefined stop-word list. This is done to reduce number of not required words. In this case unrequired words means which are not useful for analysis. In this approach author filters Prefix and suffix stripping to the world, using porter's stemmer. After this pre-processing each filtered document as a key word vector, was used as the input to the SVM for training and testing.

Sriram proposes in [2] an approach to determine the class labels and set of features with a focus on user intentions on tweeter. Such as conversation, daily chatter, sharing information, reporting news, URLs. His approach is general when compared with tweet stand.

It classifies incoming tweets into categories and private messages based on the author information and features within the tweets. His experimental result that classification accuracy is high even without meta- information and proposed approach outperforms the traditional "Bag of words" strategy.

Most of the existing system uses social filtering methods that based on recommendations on other user's performances.

In M.vanetti, E.Binaghi, B.carminati, M.Carullo and F.ferrari [3] in this paper proposed system enforcing content base message filtering for online social networks.

The system allows OSN users to have a direct control on message posted on their walls. This is achieved through flexible rule based system, that allows user to customize the filtering criteria to be applied to their wall and a machine learning based on soft classifier automatically labeling messages in support to content based filtering.

In reference [1] they used RBFN model of machine learning with short text classifier as the messages are short in nature. For short text classification they used machine learning text categorization technique to automatically categorize each short text messages base on its content. RBFN (Radial Basis Function Networks) is well suited for text classification among variety of multiclass machine learning models.

RBFN categorizes as Neutral and Non-neutral. FR filtering rules by which it can state which content should not be displayed on their wall. System provides user to blacklist user temporary and prevent him from posting any kind of messages on user's wall.

III. DISADVANTAGE OF EXISTING SYSTEM

In existing system user can post and comment on any user's wall, they do not have any restrictions on what they post. So, some people will use the indecent or ugly words while commenting on the wall, sometime this creates panic situation between friends, people, society or community.

If you don't want bad messages from sender then there is only one option that is you have to block that person. Once you block that person he cannot send you a single message that may be good or bad.

IV. PROPOSED

To overcome the disadvantages of existing system, I want propose system which provides OSN user a filtered wall which will be use to filter not required messages sent by other person. Blocking of that person who sends bad messages depend

on the trust value analysis. E.g. some message contains indecent content that you don't want to display on your wall that may be sent by your close one. So we analyze every message and calculate some value depend on words intensity and we calculate trust value of that person. When trust value of person decrease to certain level then that person will be block automatically by the system.

V. CONCLUSION

In existing system user can block unwanted person but cannot block unwanted messages. Through proposed system user can block unwanted messages and the person depend on his trust value.

Advantage of proposed system is that there is no need to block a person directly but you can block his/her bad messages and without blocking that person you can evaluate the person who is good or bad depend on trust value analysis.

ACKNOWLEDGEMENT

I wish to express my deep sense of gratitude towards my guide Asst. Prof.Sara Anjum for his constant motivation and guidance in completing my work with admirable excellence. I would also like to thank my Head of Department Asst. Prof.D.Manasa and last but not the least departmental staff members for their support.

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