Ascertaining Anxiety in Social Media

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Abstract—Human health is mainly determined by the psychological well-being of an individual. Anxiety plays a major role in human health. We need proactively identify and resolve stress, and its related consequences that follow, in human beings. Today with the trending technology, social media is growing at a fast pace. Individuals are sharing majority of their life stories through it. They tend to express happiness, sadness, joy or grief through it. Thus these data can enable us to identify their stress levels, and suggest appropriate actions to overcome it. Lifestyle changes are majorly affected by the social media emergence. Based on the social interactions of people on social networks we mainly extract the attributes, features and identify the level of stress that the user is facing.

Keywords—Stress recognition, graph Scheme, blogging sites, social network, social interaction.

I. INTRODUCTION

Anxiety has adverse effect on sensitive, psychosomatic, and social welfare of every individual. It traces how we are thinking, feeling, and acting accordingly. In our life, practice of mental health problems, can affect his or her thinking, mood, and behaviour. Objective of our work is to alert people if they are under stress through an email including the percentage of stress by monitoring the word they use in their tweets. This gentle alert can help them to bring their anxiety level to acceptable level.

Lifestyle changes are majorly affected by the social media emergence. Today people like to share each and every moment of their life through social media. Based on the social interactions of people on social networks, the system mainly extracts the attributes, features and identifies the level of stress that the user is facing. Based on the percentage of stress we can take appropriate actions like informing the individual about their stress level through an e-mail.

A. Motivation

The emotional and psychological health of people is deteriorating as days pass. One of the reasons for this can be the influence of social media and the user interactions with it. Every other person is trying to compete with others on social media platforms. People have been so much involved in social media platforms, that they post most of their daily life happening on this platform, such that their friends can view and retweet it.

There is considerable significance to notice anxiety before it becomes severe problems. Conventional psychosomatic anxiety discovery is mostly based on counselling. Though, conventional approaches are certainly responsive, which are generally labour-consuming, time-costing and hysteretic.

B. Restrictions happen in news feed content based stress discovery

Primarily, in every micro blogs there are some constraint towards the number of words for tweets as the users must express meaningful and valuable ideas and thoughts within the limited maximum value otherwise all the feeds will be of less quality. This is the main reason for such limitation being in cooperated in all micro blogs. Two such micro blogs are Twitter and Sina Weibo, and blogger usually not express their prompt level of traumatic situations openly in their tweets. Furthermore, users with high psychosomatic pressure could unveil low vitality on social networks.

C. Customers’ social connections on social systems comprise beneficial indications for stress recognition

Two though-provoking interpretation have been made so far through social psychosomatic reconsiderations. The first is mood contagion [7]: a depraved mood that’s keep moving from person to person during social communication.
The second is *linguistic echoes* [8]: in this persons are known to simulate the elegance of another person. These understandings impact us to expand the space of blogging wise examination by participating continuation social connections like remarks and retweeting actions in user’s stress discovery procedure.

D. Our Work

Objective of our project is to in cooperate a system by which the stress level can be measured through social interaction conceding the post by various user.

First, we gather the user post and try to find out words in English related to stress. Based on this we categorized into different level which is already stored in database with the indication of appropriate level. Accordingly we report the degree of stress after some analysis process.

Various stress level categorized by the system is done through proper evaluation of the tweet and if the degree is very high or beyond limit then system intimate the advice to consult for the treatment.

II. LITERATURE SURVEY

After exhaustive literature survey we didn’t find exact replica of our intended project but there some related work are listed in some studies and are listed below:

A. Mood Lens

Weibo a blogging application in china is analysing the emotion of the bloggers. This application is rename to “Mood Lens” and it has four level of emotion namely happy, sad, anger and disgust. It acknowledge the following:

- Co-relation of anger is higher degree than that of happiness in many of the blogger.
- Doubtful emotions has quicker transfer than that of happy and constructive emotions.

B. Feeling discovery in social systems

The psychological stress of blogger are more lasting, changing over with time if the instant emotion conveyed in a single blog. Latest study are focusing on blogger level emotion detection from the social network site [1][2][3][4].

C. Research on leveraging social interactions

Social network site plays major role social relations. Researcher are focusing on leveraging social interaction communication in order to improve the quality of social relation analysis [5]. Effectual cognitions are generated through the analysis of relation between blogger thinking and their behavior [6]. Leverage blogs on flicker also helps in predicting emotions through bit of image processing techniques. Our primary focus is on the content of the blogger well connected by blogging sites.

III. PROPOSED SYSTEM

Our system primary goal is on discovering the degree of stress based on the blogs from various sites. First we extract the appropriate attributes and structure from the tweet of each user then we intent to process according to the level of different stress level in order to categorized and to put into different level and to inform the user if recommendation of consultation is required based on the system.

A. Product Perspective

Our primary goal of the application is to detect the stress level from various social interaction. Classification of various attributes and user-level of stress are well define in the system and summarized using Image format to gather the degree of stress.

1. Features:

- User registration
- User can Tweet/follow
- Admin manages all the users of this platform. Admin gather data and sent give for processing
- store list of words suspected to be stressful or depict negative emotion
- Analysis is done with the comparison with the database and apply the rules for identifying the degree.
- Intimation to user if the level is extreme
- Details reports with graph chart

2. Assumptions and Dependencies:

- User must know fair computer knowledge
- Registration is must
- Active participation
- Originality of the tweet
- Tweet only in English
- Emoticons and images are not measured for identifying anxiety
IV. EXPERIMENTAL RESULTS

Detect stress for a user by selecting the date from where the tweets to be analysed.

Fig 2: Tweets by users

Fig 3: Detect stress for a user by selecting the date from where the tweets to be analysed

Fig 4: a) Mail sent to the user along with necessary details

Fig 4: b) Mail sent to the user with graph
V. Conclusion

Anxiety being a crucial factor in the overall health of a person should be determined and necessary actions should be taken at the earliest. People today are posting their daily life activities on social media and sharing it with their friends. Based on the social interactions of people on social networks we mainly extract the attributes, features and identify the level of stress that the user is facing. Thus this application can help to take proactive care to handle stress.

VI. Future Enhancements

The scope of this project is not limited to just detecting the stress level and taking necessary measures. There is much scope for future enhancements. Some enhancements (but not limited to) are specified below:

- More privacy can be provided to the user by making tweets private
- Detecting stress in our project is limited to just textual tweets, but in future it can be extended to detect stress based on Images, emotions etc.
- Detecting stress can be extended to tweets posted in other languages too ,other than English

References