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Depression Analysis via Real Time Facebook Data

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ABSTRACT: Depression are becoming a threat to people's health now a day. With the rapid pace of life, more and more people are feeling stressed. It is not easy to detect user's depression in an early time to protect user. We can utilize social information of the individuals to compute or analyze stress for better life. In proposed system framework for detecting user's psychological stress states from user's monthly social media data, leveraging Facebook post content as well as user's social interactions. We first define a set of stress-related textual, visual, and social attributes from various aspects in social network mental disorders (SNMDs), system usages Facebook's Graph API. Firstly, sentiment analysis of Facebook post carried out and secondly users are classifying, with the help of Transductive Support Vector Method(TSVM).On classification, based on stress level of users recommendations, k-nearest neighbor's (KNN) algorithm used to recommended hospital and doctors information to users. If user has low stress then system can send mail of precaution list for user.

KEYWORDS: Depression Analysis, Facebook post, KNN Map, Transductive support vector method.

I. INTRODUCTION

Depression are threatening people's health. It is non-trivial to detect depression timely for proactive care. Therefore, we presented a framework for detecting user's psychological depression states from user's monthly social media data, leveraging Facebook post content as well as user's social interactions. In this proposed system SNMD framework system using Facebook's Graph API and Facebook access token for extraction of Facebook post. TSVM (Transductive SVM) for classification of post and KNN (K-nearest neighbors) for recommendation purpose. Utilizing true online networking information as the premise, we contemplated the relationship between client's mental pressure states and their social connection practices. We suggested the client for wellbeing advisor or specialist. We can show the hospitals for further treatment on a graph which locate shortest path from current location user to that hospital. We suggested the client for wellbeing precautionary measure send on mail for client communication reason. In a proposed system mainly includes Admin and User module. Role of admin is check user is in depression or not. Add hospital dataset and add precaution file. If users are in depression occurred then admin can send a health precaution, admin can suggest any hospital for the further treatment. Role of User can any post on Facebook which are happen in his daily life. User entered token, view the result of according to post content. User can view suggested hospital on a map with a shorted distance from a current location. View Precaution file.

II. EXISTING SYSTEM

Existing works displayed that utilization electronic person to person communication for human administrations, and explicitly stretch acknowledgment, is feasible. There are a couple of confinements exist in Facebook contentbased weight revelation. Customers don't for each situation express their troubling states straight forwardly in Facebook post but no weight is revealed from the post itself, from the consequent natural comments made by the customer and her mates, we can find that the customer is truly depression from work. Along these lines, essentially relying upon a customer's Facebook post content for pressure distinguishing proof is insufficient. Users with high mental weight may show low movement on social networks. In existing system working on social media like Facebook there is no precaution file is suggested if any user found in depression and hospital is also not suggested. Depression area execution is low.

MOTIVATION:

- The stress is considered to be a major factor of change mood of a user and user goes into a depression. Now a days user can be stressed due to social interactions of social networks.

- The rapid increase of depression or stress has become a great challenge to human health and life quality. Thus, there is significant importance to detect depression before it turns into severe problems.

III. PROPOSED SYSTEM

In a proposed system architecture, we can detect whether the user is depression or not due to interaction in social network. In a social networking site like Facebook or twitter, users interact with other people. User can upload different posts on Facebook. There are three sorts of data that we can use as the underlying sources of info. Those are Facebook-level attributes, user-level posting behavior attributes, and user-level social interaction attributes. Facebook-level attributes describe the linguistic i.e. positive and negative words and visual content like brightness, cool color, dull color, as well as social attention factors (being liked, commented) of a single Facebook post.

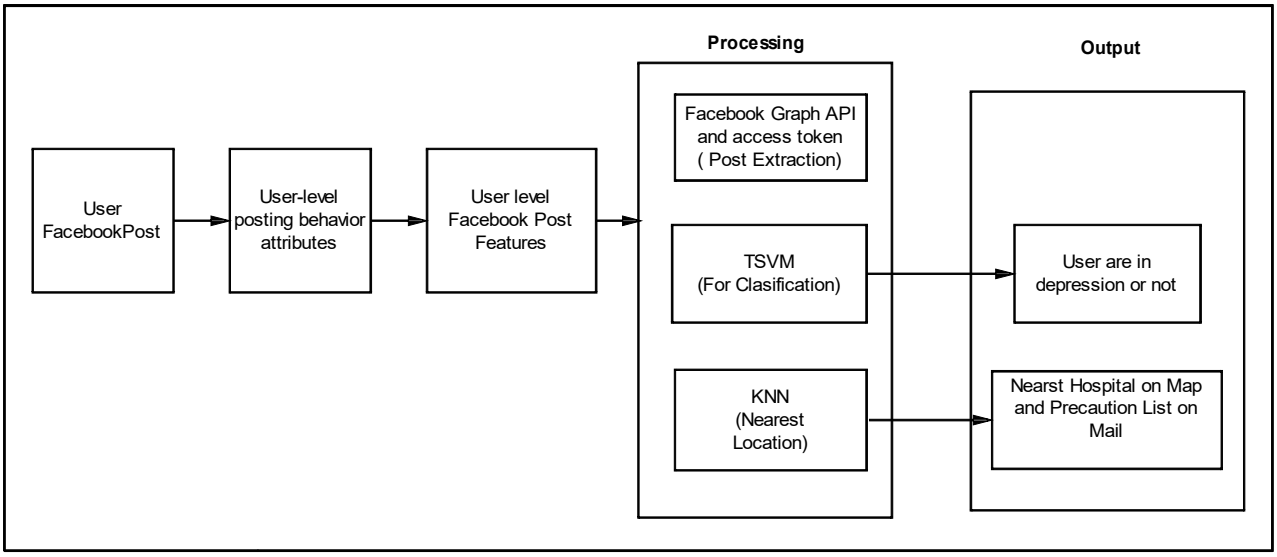

Fig 1 : Proposed System Approach

User level posting behavior attributes as summarized from a user's monthly Facebook postings, post time, post type social interaction attributes extracted from a user's social interactions with friends. Specifically, the social communication qualities can additionally be broken into: (I) Social association content characteristics extricated from the substance of client's social cooperation's with companions like words and feelings and (ii) Social interaction structure attributes extracted from the structures of user's social interactions with friends. On this user input Post, we can fetch user level Facebook post features. On that input of Facebook post, Facebook's Graph API and Facebook access token is used for topic extraction. Using Facebook's Graph API, we can perform sentiment analysis of Facebook post after formation of topic. Using (TSVM) Transductive Support Vector Machine we can classify if the users are in stress or not. After classification of user whether he or she is stressed or not, k-nearest neighbor's algorithm (KNN) is used for recommendation of hospital on a map as well as admin can send mail of precaution list for user to become healthy and happy in life.

IV. CONCLUSION

Depression is threatening people's health. It is non-trivial to detect depression or stress timely for proactive care.Therefore, we presented a framework for detecting users psychological stress states from user's mostly social media data, leveraging Facebook post. In this proposed system SNMD (Social Network Mental Disorder) framework system using Facebook's Graph APIandFacebook access token is used for extraction of Facebook post. TSVM (Transductive SVM) for classification of post and KNN (K-nearest neighbor's) for recommendation purpose. Utilizing true web-based social networking information as the premise, we considered the relationship between client' mental pressure states and their social communication practices.

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