Recognition of Position Group Relationship in Dynamic Social Networks

Duddu Thabitha, B. Jhansi Vazram, G. Ezra Sastry

Abstract: Mental stress is turning into a threat to people's health currently days. With the last step of life, a lot of and a lot of folks are feeling stressed. A novel hybrid model combined with Convolution Neural Network (CNN) to control tweet content and social interaction information for stress detection effectively. Network anomaly detection is an important and dynamic research area. Many network intrusion detection methods and systems (NIDS) have been proposed in the literature. Fake news detection on social media presents unique characteristics and challenges that make existing detection algorithms from traditional news media ineffective or not applicable. Based on the information that is provided by the online social network, the conditions are limited. This method can opinion investigation of Facebook post after Formation of point utilizing Support Vector Method (SVM). After grouping client is in pressure or not k-closest neighbor calculation (KNN) is utilized for proposal emergency clinic on a guide just as Admin can send letters of precautionary measure list for the client for end up solid and upbeat throughout everyday life

Keywords: Stress detection, micro-blog, social media, social interaction, factor graph model, social media, social interaction

I. INTRODUCTION

Stress is called simply feeling of being overloaded, wound uptight, tense and worried. It can sometimes help to motivate us to get a task finished or completed or perform well [1]. Considerable resources have been dedicated to establishing effective methods for locating people suitable for working groups [2]. Some success has been attained in the use of web-based courses using shared spaces and annotation of the web-pages, and adaptive desktops for accessing their evolving contents [3]. In this Stress, results are analyzed from the tension between an individual's reaction to difficulties or challenges and his or her ability to handle and resolve the stressful situation. How many numbers of peoples manage with stress depends on the resources [4]. This model addresses the problem of identifying a user through location information from an LBSN. resources [4]. This model addresses the problem of identifying a user through location information from an LBSN.

Therefore the aim is to elaborate several strategies for the identification of users given their check-in data [5].

More specifically, this method firstly proposes a trajectory-based approach where a user is identified simply considering the trajectory of spatiotemporal points given by his check-in activity [6].

In addition to this, it proposes a series of alternative Probabilistic Bayesian approaches where a user is characterized by his/her check-in frequency at each location [7].Dynamic network change detection is applied to longitudinal observed network data to rapidly detect small persistent changes in the underlying structure being modeled [8]. It assumes that these structures are not fixed and that their relationships, attributes, and composition may change over time [9].The headway of informal organizations like Twitter, Face book and Sina Weibo2, a consistently increasing number of individuals will share their consistently occasions and states of mind and associate with companions through the interpersonal organizations [10]. Here the health development skills should be implemented to avoid the stress which leads to anxiety and aggression [11].
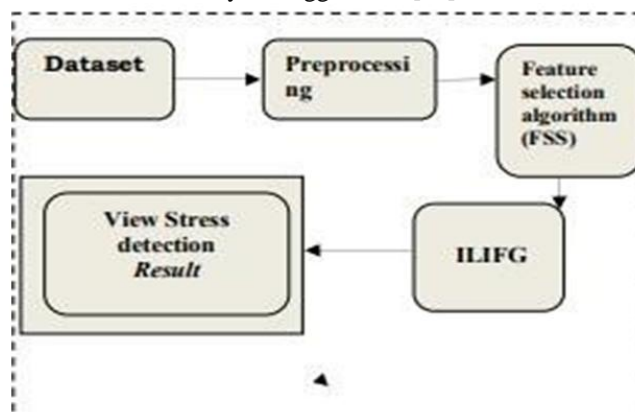

Fig.1 The structure of a human activity system

II. RELATED WORK

The data is shared with friends through social network is very common in this present world. Because the development of networking is very high [12]. Feasibly the most related work is that of where they develop the DMMSB model to identify roles in the graph and how these memberships change over time [13].

Cluster is nothing but an group of objects that combine together in the form of group. This is mainly used in the data mining applications [14]. In this concept present Mood Cast process based on a dynamic continuous factor graph model for modeling and concludes users' emotions in a social network. Mood Cast formalizes the problem into a dynamic continuous factor graph model and defines three types of factor functions to capture the different types of information in the social network [15].

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by using the location of user, the problems are identified. Depend on the data set given, the user provides the better communication between social ties and mobility [16]. By using user data, the values are stored in data set. This data is passed through the cluster. This cluster mainly uses k-means algorithm to determine the number of clusters [17]. Fig.2 Limitations in existing system is that stress analysis:
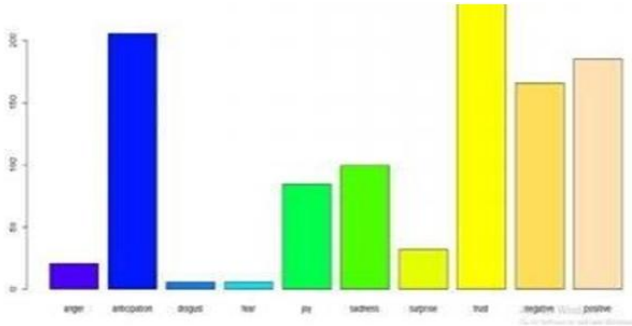
III. SYSTEMS ARCHITECTURE

By using various types of sentiments, the data is extracted from the twitter [18]. This will determine the structure and class of the tweet. All tweets are classified based on the stcruture which has been very sentimental [19]. Here the operating system is controlled by maintaining proper security from internal way and also external way. This done by using the HIDS agent. To detect the intrusion, HIDE method is implemented. This method is mainly based on the network classifier [20]. Here the user will get an permissin to collect the information from face book and to save the data securely [21].
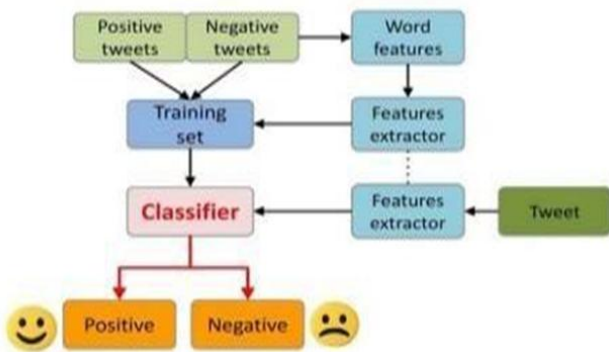

Fig.3 System Architecture

IV. PROPOSED SYSTEM

In the proposed system architecture it can detect users are in stress or not due to interaction social network. The social network contains facebook, twitter. On Facebook, the user is interacting with other people. Users can different posts on facebook. A conventional neural system (CNN) is utilized for subject extraction. Utilizing CNN this model can assessment investigation of facebook post after Formation of point Using Support Vector Method (SVM) this system can characterize client are in pressure or not [22]. Admin can send letters of safety measure list for a client for wind up solid and glad throughout everyday life. The system can demonstrate which age classification people are in pressure.
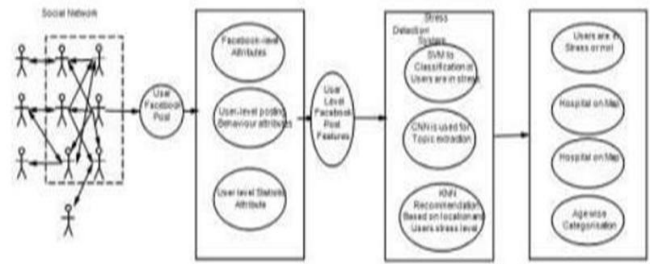

Fig 4. Proposed System Architecture

A. ALGORITHMS:
SUPPORT VECTOR MACHINE: TO ANALYZE THE DATA FROM CLASSIFICATION, SUPER VECTOR MACHINE IS INTRODUCED. THIS WILL REGRET THE DATA FROM THE ANALYSIS PART [23].
Input:-User facebook post Algorithm Step1: SVMs maximize the margin around the separating hyper plane. Assume linear reparability for in 2 dimensions can separate by a line in higher dimensions, need hyperplanes Can find separating hyperplane by linear

Step2: The decision function is fully specified by a subset of training samples, the support vectors.

Step3: Quadratic programming problem **Step4**: the 1s and 0s are combined by using the test classification method. After this it will be given to the state vector machine. Therefore, the user will determine the levels as for 1 the value will be negative and for 0 the value will be positive and for 2 the value will be neutral.

Output: - Classified user stress positive post or negative post.

V. GENERATE DECISION TREE

To formulate the generated problem, these models declare some notations in advance.
To represent the matrix vectors bold capital letters and bold small letters are used [24].

1. The termination criterion should be checked properly.
2. The information is passed to all attributes present in the criterion.
3. Choose the best attribute according to the information-theoretic criteria
4. In step 3 the node is designed based on the attribute.
5. Here a new node is created by using data.
6. To get the recursive call in sub tree and c4.5 algorithm is used.
7. The tree that is obtained will be combined to the decision node.
8. Return tree

Different clustering techniques are used to collect the data. classification of k-mean algorithm has to use in this module. Recommending users with different centres to counsil the music psychologically.

VI. METHODOLOGIES

Data preprocessing prepare raw data for further processing. Proposed used latent factor model to reconstruct the missing data from the records collected from a UCI in a different unit in certain scenarios, the model is selected based on detection theory to guess the outcome of probability [25].

Input: A series of time-varying attribute augmented network G with stress states on some of the user nodes, learning rate h; Output: parameter value full stress state vector Y;

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   Step 1: Import the libraries

   Step 2: Import the data-set

   Step 3: Check out the missing values

   Step 4: Process continues until total dataset length

   Step 5: Randomly initializes Y;

   Step 6: Initialize model parameters u; Repeat

   Step 7: Compute gradient;

   Step 8: Update full stress state

   Step 9: Update probabilistic graphical model

VII. EXPERIMENTS RESULTS

Dataset collection Data collection is the process of gathering and measuring information on targeted variables in an established systematic fashion, which then enables one to answer relevant questions and evaluate outcomes. The Center for Computational Analysis of Social and Organizational Systems (CASOS) at Carnegie Mellon University collected and maintains social network data on the Al- Qaeda terrorist network. This data includes many different relationships to include communication, financial, physical. Social network measures were plotted over time for the number of agents, the average degree, and the average between's, the average closeness, the average eigenvector centrality, and the density. From the results shown in the graphs, it can be observed that the proposed model-based approaches provide better accuracy and increased true positive rate when it is analyzed with a different number of datasets. The system finally performs the analysis to show the accuracy of the proposed system in graph format
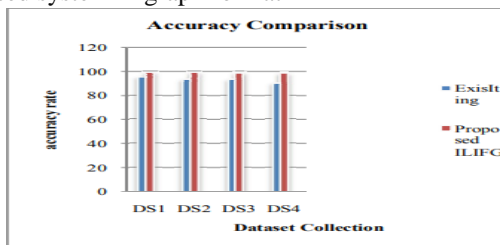

Fig 5.Accuracy Comparison

VIII. CONCLUSIONS AND FUTURE WORK

In this a new system is introduced to relieve the stress of users. This system provide better interaction compared top others. The experimental result shows that the integrated extended proposed algorithm shows better quality assessment compared to traditional research techniques. From the experimental results, the prediction accuracy of the proposed

algorithm reaches 98.8% with a convergence speed which is faster than the existing system. Better accuracy is provided to the user by using this system. This presents a framework for detecting users' psychological stress states from users' monthly social media data, leveraging facebook post ' content as well as users' social interactions. The main intent of this is to detect the stress of user by analyzing the mind of people. In future, an image is used to detect the users intention. By using thois image the users stress is evaluated. Further enhancements can be made to the application by expanding the existing modules use this model as a functional base to develop an appropriate data mining system for organization performance

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