Election Result Analysis of Sentiments in Opinions using Supervised Learning Technique

Pavithra G[1], Divyabharathi B[2], Monisha S[3], Ragavi R N[4], Vanmathi M[5]

[1,2,3,4,5]Department of Computer Science and Engineering

M. Kumarasamy College of Engineering,Thalavapalayam,Karur-639113.

pavithrag.cse@mkce.ac.in , divyabharathi7638@gmail.com , monisha18shankar@gmail.com

, ragavirajucse@gmail.com, vanmathimkce@gmail.com

Abstract

The focal issue in the present Social Networks is to enable clients to control the posts that are shared on their own space to keep undesirable material from affecting popular assessment and supporting non-industrial nations in fortifying their majority rule political race measures. Then again, created nations that need essential necessities have a monopolistic electing structure. Political, obscene, non-neural, and different kinds of information might be available in the undesirable information. we may utilize a book examination instrument that classifies the words in our posts dependent on our inclinations, about us, occupations, and recently posted posts. This methodology is utilized to make a high contrast list. Messages from the white rundown are posted 90% of the time; in any case, an inquiry to check whether the individual is the correct individual is performed. As opposed to information base applications, which utilize profoundly organized information, message sifting frameworks are intended for unstructured or semi-organized information. Enhancements to the presently utilized electing strategies in the execution segment. In the 2016 General Elections, Pakistanis utilized online media to revitalize backing and backer for ideological groups. Utilizing this interaction, all division posts are checked and a high contrast list is made and checked. The client remarks are gathered into two classifications: boycott and white rundown, utilizing feeling investigation. At that point, interestingly login validation, it checks with the IP area to see whether an affirmed individual has signed in or whether a programmer has gotten to any data. To recognize, anticipate, and estimate political race results, enormous scope research, conclusion ID, and tweet arrangement were utilized to examine the adequacy of web-based media derived from individual political direct.

Keywords

Machine learning Technique, Sentiment Analysis.

Introduction

There is the mindfulness that the Web is a significant wellspring of public safety applicable data, and that quantitative examination is a promising method to address the issue of gathering and breaking down information at scale on the Web. Subsequently, instruments and calculations that help different security informatics objectives have been set up. For example, we've exhibited how blog network elements can be utilized to give exact early admonition to a class of radical related true dissent occasions. Lately, the utilization of web-based media has

improved. Web applications that take into consideration the creation and sharing of client extracted content are known as web-based media [23]. Long-range interpersonal communication advances support people, associations, and different social orders. PC-based online media applications were redesigned as microblogs for hand-held gadgets, for example, mobile phones as time went on. These microblogs are utilized to trade text, pictures, and media joins between clients. Individuals should keep in touch with others to remain refreshed. This remarkable development can be seen in all cases, including Facebook, FriendFeed, MySpace, and Twitter. It is both essential and actually hard to figure out online substance at a huge scope. Conversations via web-based media stages like web journals and discussions, for instance, regularly mirror the suppositions and perspectives of people and gatherings on security-related issues, and subsequently may address important insight information.

These perspectives, be that as it may, are frequently expressed in casual correspondences and covered in enormous amounts of unessential talk, making compelling and solid extraction troublesome. Albeit incredible examination procedures have been produced for regular types of substance, little has been accomplished for non-conventional types of substance. to make methods that are appropriate to the novel highlights of online media content Consider the basic errand of deciding if a specific post presents a positive or negative perspective regarding a matter of interest. The casual, multilingual presence of online media content makes language-based feeling investigation troublesome [1, 2, 3]. Acquiring the fundamental named occurrences of information, for example, a dictionary of opinion loaded words for a given area or an assortment of "model" blog entries of known extremity, is work escalated and tedious for Web applications.

The utilization of web-based media exploration to see day by day experiences with security innovation has not yet been thought of. While thinking about why new techniques for catching naturalistic every day encounters might be required, it's critical to recall that there are two types of data that scientists may look to acquire from clients through research: unequivocal information and inferred information.

Explicit awareness alludes to data that is effectively adaptable to someone else, for example, an individual's number of kin or the number of passwords they use. Notwithstanding, quite a bit of what we think about the world is implied information, which is hard to move to others

For instance, how to utilize complex gear (where related knowledge has driven learning) or why a gadget has a sense of security.

Getting to implied data generally permits specialists to utilize a blend of approaches in their experiences with individuals (e.g., perceptions, studies, journals, and so on) to perceive and catch cases of fascinating practices, and may likewise include working together with members to not just feature that intriguing practices happen in any case, yet in addition to clarifying why such practices emerge. A couple of techniques in open security go past regular meetings and reviews to evoke this verifiable data; these customary strategies are better used to catch unequivocal information (aside from where discourse is explicitly upheld), as they do empower respondents to zero in on their own exercises inside an experimenter-characterized setting.

The utilization of web-based media posts as a crystal for day by day security connections will have an assortment of methodological benefits immediately:

• People are allowed to clarify their musings and practices utilizing their own words.

• Posts are delivered in naturalistic conditions and as a component of everyday exercises.

• There is countless online media messages to research, and they are typically restricted long.

• Protection will be situated as a social and public practice, instead of an individual and secret practice.

Literature Review

The feeling examination of tweets from the MAsen10 lobby was finished by Jessica Chung. They utilized the Opinion-Finder procedure to discover estimation investigation and got a general precision of 41%, which isn't awesome. They utilized SentiWordNet, a lexical asset with 207, 000 sets of words, to support precision, and generally exactness improved to 47.19 percent. They applied feeling investigation to tweets yet couldn't improve precision with the techniques they developed.

Customized privacy protection, as indicated by Xiao and Tao, demonstrates that l-variety actually guarantees preferable protection conservation over k-namelessness. Regardless of the way that few significant models and various productive calculations have been proposed to ensure protection in social information, most of ebb and flow examination can just arrangement with social information. Such methodologies aren't effectively versatile to

information from interpersonal organizations. It's definitely more hard to anonymize interpersonal organization information than it is to anonymize social information.

By directing a few notion examination tests, Daniel Gayo-Avello explored the prescient force of web-based media against a few Senate races utilizing the MAsen10 and USsen10 informational collections. As indicated by them, basic tweet share can't be utilized to conjecture political decision results; all things considered, notion investigation should be utilized to accomplish better outcomes. Daniel investigated contentions that web-based media can't be utilized to gauge races, instead of depending on Tumasjan and Brendan's examinations [3] [13]. Daniel utilized [13] methods to join the two streams and inferred that the preelection volume of tweets for MAsen10 had all the earmarks of being useful for political decision forecast. The Tumasjan interaction yielded a MAE of 17.1%, and supposition investigation yielded a MAE of 7.6%.

"Opposing primary acknowledgment in anonymized informal organizations," by Hay et al., utilized an essential diagram model with unlabelled vertices and edges. They investigated vertex identifier assaults and recommended a vertex grouping technique. As potential enemy setting mindfulness, three models of outside data were thought of. These models mirror an assortment of primary information that a foe may approach, like total and incomplete depictions of vertex areas, just as connections to arrange centre points. The creators [7, 8, 9] formalized a vertex's underlying vagary from an enemy utilizing outer information about the vertex's nearby area. The sorts of inquiries are utilized to demonstrate foe setting data specifically.

The public key cryptography was utilized by David L. Chaum. Here using two keys: a public key that is noticeable to other people and a private key that is simply obvious to the proposed beneficiary. To give further security to the information, it is encoded by embeddings some arbitrary pieces and afterward scrambling with a public key. There are two suppositions in the plan:

a)Without the necessary irregular string or private key, nobody may choose or build up falsifications about the correspondence between a bunch of fixed things and the comparing set of unlocked things.

b)Anyone in the basic media transmission framework can get familiar with the source, destination(s), and portrayal, everything being equal, and anybody can embed, erase, or adjust messages.

Yanfei Fan, Yixin Jiang, Haojin Zhu, and Xuemi (Sherman) Shen [5] distributed a paper in which they proposed a viable security safeguarding plan for network coding against traffic examination. On Global Encoding Vectors, it utilizes a light-weight homomorphic encryption measure (GEVs). The plan included significant security highlights, for example, bundle stream obstinacy and message content classification, which forestall traffic examination assaults including stream following.

Stable multiparty calculation and non-intuitive zero-information verification are two compelling conventions executed by Rack off and Simon's way to deal with give security against foe. Outside enemy, latent inner foe, and dynamic interior foe are the three kinds of foes recorded in the paper. It likewise addresses how to conquer the previously mentioned obstructions to traffic investigation. The procedure is to counter traffic investigation. It sends the message through a progression of blends so that it ought to totally separate itself from the change that outcomes. The rate at which such Markov measures merge on their steady circulation decides the speed of the interaction. Sadly, since it is simultaneous, just two messages can be sent through the blend hub stage at a time, and routes are obstructed. It is hard to submit in the advanced world.

By consolidating indirection and information collection, William Conner, TarekAbdelzaher, and KlaraNahrstedt present a technique for forestalling traffic examination in an objective following sensor network. It utilizes the imitation sink convention. A distraction sink hub gets messages from all sensors, totals them, and makes a synopsis, which is then shipped off the genuine sink hub. Because of total, this system brings about more traffic close to the distraction sink hub and less close to the genuine sink hub. This strategy keeps enemies from performing traffic examination on the situation of the genuine sink hub.

Farhad thought about the official decisions in France and the United States in 2012, utilizing a period arrangement supposition investigation strategy and restricting their outcomes to only two competitors, Barack Obama and Mitt Romney on account of the United States. They figured scores dependent on three diverse scoring highlights, extremity, feeling, and partiality, to perform time arrangement slant investigation for US applicants and for French

up-and-comers. They accepted that Twitter was the best gathering for passing judgment on up-and-comers and responding to their allies, just as the other way around.

Proposed System

We gathered 612,802 tweets utilizing the Twitter API to investigate the subjective conduct of Twitter. These tweets were centered around switches/catchphrases that included complete names and abbreviations of different ideological groups and political superstars. These names were accumulated from the site of the Indian Election Commission. Subsequently, a gigantic measure of significant and disconnected tweets from other geological areas and dialects were downloaded. The positions given by twitter clients in their profiles were utilized to confirm the locales. As indicated by, the rising tide of informal community assaults implies that "interpersonal organizations and their great many clients should do significantly more to guard themselves from coordinated cybercrime, or hazard succumbing to wholesale fraud plans, tricks, and malware assaults."

"The field of web data security is very much evolved and advances continually because of new dangers," as per the investigation, "and it should develop with web-based media too." Personal data, for example, street numbers and private contact data ought to be held to a base. A cybercriminal can sort out this data, just as data about your inclinations and day by day schedule. Believe the Internet to be a public asset. Regardless of whether security settings are set up, data posted can in any case spread because of companions reposting it, and it is put away on workers that are helpless against hacking. Be sure that whatever you share via web-based media stages will be seen by the overall population. Regularly, be careful about outsiders and dubious of them. A few group are not who they say they are, and they might have taken somebody's character to perpetrate cybercrime.

Sentiment Analysis

We picked manual marking of tweets dependent on the method characterized by Theresa et al. [11] to address feeling irregularity with emojis. Positive tweets were portrayed as those that offered thanks or satisfaction for another gathering. Negative tweets, then again, were marked as such in light of the fact that they contained negative words or emojis for a specific political gathering. Nonpartisan tweets, then again, were those that didn't show any predisposition against any gathering yet were connected to the overall political race. Thusly, we had the option to incorporate tweets with political positive, negative, and unbiased assumptions for an assortment of gatherings in our outcomes. We started by checking around

3600 tweets, with roughly 1200 tweets (roughly 33.33 percent) dispensed to every certain, negative, and unbiased gathering. Three separate individuals named the tweets, and the outcomes were then consolidated to shape the reason for preparing information. Copy tweets, URLs, Extra whitespaces, Repeated expressions, words starting with number, Small words (edge set 3) and Punctuations were totally taken out from the marked information in a content record, with each line addressing an individual tweet. For additional examination, the terms Mentions and Hashtag were kept isolated. At long last, the whole content information from the tweets was meant lower case.

Opinion investigation is a multidisciplinary region of exploration that investigates individuals' considerations, practices, feelings, and discernments about different elements like products, offices, people, organizations, associations, occasions, and subjects. It fuses various fields, for example, characteristic language handling (NLP), computational semantics, data recovery, AI, and man-made consciousness. It is a bunch of computational and characteristic language handling (NLP) strategies that can be utilized to remove emotional information from a book. In contrast to realities, suppositions and feelings are abstract. Regardless of the new flood of interest in slant examination since the word was begat by, the requirement for data on notion and discernment in dynamic circumstances originates before the far reaching utilization of the World Wide Web. Assessments are significant in pretty much every part of human existence since they can impact our activities, particularly when deciding.

Language Processing Based Methods

Different works, in the mean time, have taken a gander at opinion examination from two viewpoints: dictionary based and phonetic investigation. Supposition or assessment terms like pleasant, incredible, terrible, and evil, just as specific expressions and maxims used to pass on sure or negative feelings, are the most clear however critical markers of slants. For notion examination, an assumption vocabulary is an assortment of specific terms and expressions. It is fundamental however not suitable. Etymological based methodologies utilize the syntactic type of the content for conclusion grouping notwithstanding vocabularies. Word reference based and corpus-based methodologies are the two sorts of vocabulary age techniques accessible. The principal classification starts with a little assortment of assessment terms and broadens the dictionary by bootstrapping a particular jargon, while the subsequent classification learns the dataset and produces the assessment vocabulary.

We utilized the strategies NB, KNN, and Prind to recognize the information utilizing Rainbow. As highlights vectors, we utilized an assortment of words (uni-gram) with the most elevated common information, going from 10 to 200. We utilized the Laplace technique to smooth word probabilities, which assisted us with forestalling zero qualities. Watchman Stemmer was utilized to do the stemming. The correctnesses were determined independently for positive and negative feelings, good, negative, and impartial estimations, with 40% of the information going into the test set and the rest of into the preparation set.
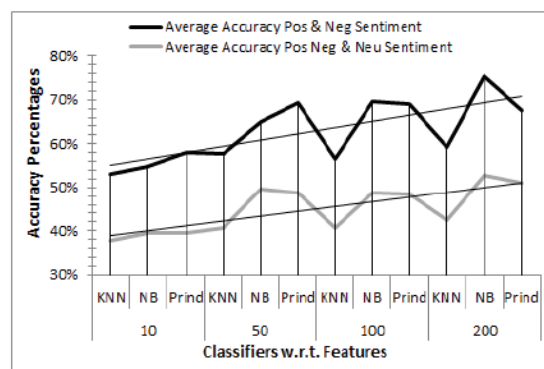
Fig. 1. Effect of Feature Size for Rainbow

Figure 1 shows a model. 1. We can see that for two gatherings, positive and negative, a normal precision of 70% estimated or more was acquired. Since we have tweets that are neither hopeful nor negative, our exactnesses have diminished since the impartial class was added.

Proposed Algorithm

Supervised Learning Algorithms for Sentiment Analysis in Text

The information that has been pre-handled is a bunch of highlights (words). Utilizing the feeling word reference, the good, negative, and impartial frequencies of highlights in test information are assessed, and afterward the probability of the info having a place with each of the three gatherings, good, negative, and unbiased, is determined utilizing various strategies.

The accompanying pre-handling is needed for notion examination:

1. Commotion expulsion - eliminating pointless news just as notices/profiles from the outcomes (in the event that you have gathered information by web slithering)

2. Arranging news information into different areas, for example, "Markets," "Economy," "Industry," "and Technology, etc. It is similarly just about as significant as the calculation

since various spaces would have various arrangements of highlights, requiring an alternate classifier for every area.

3. Named Entity - Investigation on Politics needs well known ideological groups. So we need to pick political pioneers, for example, NarendraModi, Rahul Gandhi and different components like rationalism/great deeds for minority from the news and after that we will order the tweets either certain or negative.

4. Subjectivity Classification – Subjectivity isn't about a person's assessment. It is simply founded on the popular assessment however not current realities.

5. Highlight picking – In a section or tweet, we need to do information preprocessing. The fundamental advance is to wipe out the stop words. By bringing in a stop words archive, and checking singular word with that record we can dispose of stop words which diminishes exactness. The following stage is Lemmatization which eliminates verb modifiers and converts the word into root structure. Accentuations like outcry, questions are eliminated.

Implementation of Proposed system

1. Registration of new applicant

In the event that an applicant wishes to build up a fellowship for systems administration purposes, the individual in question should round out the essential data in this module. In new up-and-comer enlistment, the competitor gives their name, length, birth date, area, telephone subtleties, area, and other required information. At long last, administrators acquire the data and continue to the subsequent stage in the process for candidates.

2. Login

At the point when a client enters his login subtleties and association with the front end page, the login framework verifies whether the client is a genuine up-and-comer. Since the framework is managed by the client id, a client is characterized by the individual one of a kind component. As a feature of the plan, the client login is checked with secret key to check unique record.

3. Data Acquisition

- To gather continuous twitter information, we need to make engineer represent twitter in the site called dev.twitter.com

- After all the login confirmation developer account is made.
- To get Twitter API we need to address every one of the inquiries posed by the twitter in regards to the motivation behind designer account.
- At long last it will furnish you with access key, access tokens and confirmation keys for the interation with the twitter to the product which we are utilizing to run codes.

4.Onion Model

At that point made 2 details were established yet we can't utilized that details for the classification. Amateur clients showed intriguing examples utilizing the refreshed onion model. To start with, altogether gatherings, the absolute number of associations shows the reality which, demonstrating an expansion in friendly interest. Second, higher-classification individuals have a more extended normal time of activity than lower-classification individuals. Implying that clients made record as of late began at any rate layer and continuously observed to more elevated levels during certain higher time span.

5. Privacy Stages

Set the necessary degree of protection for pictures, blog entries, and picture displays utilizing the securty estimations accessible in every single highlights of the assistance. Recollect who you need to see the material and who you need to see it. In the event that you don't set worthy security levels, you hazard having abusive, derogatory, or explicit messages surface on your profile before you can erase them. This could cause generous individual trouble, put the person's or the association's standing in danger, and require the contribution of the association.

6. Tagging

By and large labeling manages individual posting a few posts and referencing some different people with whom he spend that second. Due to this some irregular people not know to that individual labeled and labeled people can interface among themselves. We can eliminate the tag yet we can't erase the real post. A few issues may emerge because of obscure contacts. So to wipe out this sort of issues, terms and conditions are applied to the clients over the age 18 can just access sites.

Conclusion

Another approach to beat fatigue is to utilize the local area to help the strength. This second, there are not many highlights in the amateur's client climate to urge clients to make progressively complex information. Alongside this extra highlights for the information preprocessing will be incorporated for the better model and further augmentation of precision rate.

We may get some phony news from the tweets. We ought not deal with that sort of tweets. This issue can be wiped out by AI calculation called Passive backward classifier calculation. In which we will discover the quantities of times a word is continued utilizing a factor called term recurrence and reverse term recurrence estimation. Disinformation consistently has a little spending plan, consideration ought to be given to the most destructive reports. Controlling the negative impact would require a precise method to evaluate the conceivable effect of deception.

References

[1] M. Skoric, N. Poor, P. Achananuparp, E. Lim, J. Jiang, Tweets and Votes: A Study of the 2011 Singapore General Election, 45th Hawaii International Conference on System Sciences, Pages 2583-2591, 2012.

[2] Murugesan, M., Thilagamani, S. ,” Efficient anomaly detection in surveillance videos based on multi layer perception recurrent neural network”, Journal of Microprocessors and Microsystems, Volume 79, Issue November 2020, https://doi.org/10.1016/j.micpro.2020.103303.

[3] A. Tumasjan, T. Sprenger, P. Sandner, and I. Welpe, Predicting Elections with Twitter: What 140 Characters Reveal about Political Sentiment,International AAAI Conference on Weblogs and Social Media, 2010.

[4] Thilagamani, S., Nandhakumar, C. .” Implementing green revolution for organic plant forming using KNN-classification technique”, International Journal of Advanced Science and Technology, Volume 29 , Isuue 7S, pp. 1707–1712

[5] S. Stieglitz, L. D. Xuan, Political Communication and Influence through Microblogging- An Empirical Analysis of Sentiment in Twitter Messages and Retweet Behavior, 45th Hawaii International Conference on System Sciences, 2012.

[6] Thilagamani, S., Shanti, N.,” Gaussian and gabor filter approach for object segmentation”, Journal of Computing and Information Science in Engineering, 2014, 14(2), 021006, https://doi.org/10.1115/1.4026458

[7] N. Sharma, S. Ghosh, F. Benevenuto, N. Ganguly, K. P. Gummadi, Inferring Who-is-Who in the Twitter Social Network,Workshop on Online Social Networks (WOSN)-ACM SIGCOMM, 2012.

[8] Rhagini, A., Thilagamani, S. ,"Women defence system for detecting interpersonal crimes", International Journal of Advanced Science and Technology, 2020, Volume 29,Issue7S, pp. 1669–1675

[9] A. Boutet, H. Kim, E. Yoneki, What's in Twitter: I Know What Parties are Popular and Who You are Supporting Now!, IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, 2012.

[10] K.Deepa, S.Thilagamani, "Segmentation Techniques for Overlapped Latent Fingerprint Matching", International Journal of Innovative Technology and Exploring Engineering (IJITEE), ISSN: 2278-3075, Volume-8 Issue-12, October 2019. DOI: 10.35940/ijitee.L2863.1081219

[11] T. Wilson, J. Wiebe and P. Hoffmann, Recognizing contextual polarity in phrase-level sentiment analysis, Human Language Technology and Empirical Methods in Natural Language Processing Pages 347-354, 2005

[12] Deepa, K., Kokila, M., Nandhini, A., Pavethra, A., Umadevi, M. "Rainfall prediction using CNN", International Journal of Advanced Science and Technology, 2020, 29(7 Special Issue), pp. 1623–1627. http://sersc.org/journals/index.php/IJAST/article/view/10849.

[13] B. O.'Connor, R. Balasubramanyan, B. R. Routledge, N. A. Smith, From Tweets to Polls: Linking Text Sentiment to Public Opinion Time Series, Fourth International AAAI Conference on Weblogs and Social Media, 2010.

[14] Santhi, P., Mahalakshmi, G., Classification of magnetic resonance images using eight directions gray level co-occurrence matrix (8dglcm) based feature extraction, International Journal of Engineering and Advanced Technology, 2019, 8(4), pp. 839–846

[15] Santhi, P., Lavanya, S., Prediction of diabetes using neural networks, International Journal of Advanced Science and Technology, 2020, 29(7 Special Issue), pp. 1160–1168

[16] Chen, H., C. Yang, M. Chau, and S. Li (Editors), Intelligence and Security Informatics, Lecture Notes in Computer Science, Springer, Berlin, 2009.

[17] Santhi, P., Priyanka, T.,Smart India agricultural information reterival system, International Journal of Advanced Science and Technology, 2020, 29(7 Special Issue), pp. 1169–1175.

[18] Bergin, A., S. Osman, C. Ungerer, and N. Yasin, "Countering Internet Radicalization in Southeast Asia", ASPI Special Report, March 2009.

[19] Vijayakumar, P, Pandiaraja, P, Balamurugan, B & Karuppiah, M 2019, 'A Novel Performance enhancing Task Scheduling Algorithm for Cloud based E-Health Environment', International Journal of E-Health and Medical Communications , Vol 10,Issue 2,pp 102-117

[20] Pang, B. and L. Lee, "Opinion Mining and Sentiment Analysis", Foundations and Trends in Information Retrieval, Vol. 2 , pp. 1- 135, 2008.

[21] P. Pandiaraja, N Deepa 2019 ," A Novel Data Privacy-Preserving Protocol for Multi-data Users by using genetic algorithm" , Journal of Soft Computing , Springer , Volume 23 ,Issue 18, Pages 8539-8553

[22] Dhillon, I., "Co-Clustering Documents and Words Using Bipartite Spectral Graph Partitioning", Proceedings ACM International Conference on Knowledge Discovery and Data Mining, San Francisco, August 2001.

[23] Kim, S. and E. Hovy, "Determining the Sentiment of Opinions", Proceedings International Conference on Computational Linguistics, 2004.

[24] Sindhwani, V. and P. Melville, "Document-Word Co-Regularization for Semi-Supervised Sentiment Analysis", Proceedings 2008 IEEE International Conference on Data Mining, Pisa, Italy, December 2008.

[25] http://www.cs.cornell.edu/People/pabo/movie-review-data/.

[26] N Deepa , P. Pandiaraja, 2020 ," Hybrid Context Aware Recommendation System for E-Health Care by merkle hash tree from cloud using evolutionary algorithm" , Journal of Soft Computing , Springer , Volume 24 ,Issue 10, Pages 7149–7161.

[27] http://www.borgelt.net/bayes.html.

[28] www.mediaislam-bushro.blogspot.com.

[29] N Deepa , P. Pandiaraja, 2020 , " E health care data privacy preserving efficient file retrieval from the cloud service provider using attribute based file encryption ", Journal of Ambient Intelligence and Humanized Computing , Springer , https://doi.org/10.1007/s12652-020-01911-5

[30] P. Burnap, R. Gibson, L. Sloan, R. Southern, and M. Williams, 140 characters to victory?: Using Twitter to predict the UK 2015 General Election Journal of Electoral Studies, vol. 41, pp. 230-233, 2016.

[31] K Sumathi, P Pandiaraja 2019," Dynamic alternate buffer switching and congestion control in wireless multimedia sensor networks" , Journal of Peer-to-Peer Networking and Applications , Springer , Volume 13,Issue 6,Pages 2001-2010.

[32] D. Gayo- Limits of electoral predictions using Twitter Proceedings of the 5th ICWSM, 2011, pp. 178 18.

[33] Shankar, A., Pandiaraja, P., Sumathi, K., Stephan, T., Sharma, P. ," Privacy preserving E-voting cloud system based on ID based encryption " Journal of Peer-to-Peer Networking and Applications , Springer , https://doi.org/10.1007/s12083-020-00977-4

[34] Using Twitter sentiment to forecast the 2013 Pakistani Elect Journal of IEEE Intelligent Systems, vol. 30, pp. 2-5, 2015.

[35] elections with Twitter: What 140 characters reveal about political Proceedings of the 4th ICWSM, 2010 , pp. 178 185.

[36] political Proceedings of Workshop on Sentiment Analysis where AI meets Psychology (SAAIP), 2011, pp. 2.

[37] Sumathi, K., Naveena, K., Prashanth, P., Revanthkumar, S., Srikeerthanaa, A.P.,E-health based patient surveilling device,International Journal of Emerging Trends in Engineering Research, 2020, 8(3), pp. 792–796

[38] B.O. Connor, R. Balasubramanyan, B.R. Routledge, and N.A. Smith, Proceedings of the 4th ICWSM, 2010, pp 122 129.

[39] J. GolbeckJournal of Social Networks, vol. 36, pp. 177- 184, 2014,

[40] S. Asur and B.A. Huberman, Predicting the future with social media Proceedings of International Conference on Web Intelligence and Intelligent Agent Technology, 2010, pp. 492 499.