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## Abstract

Emotions play important role in human intelligence, Social Interaction, memory, learning, and more. Emotions are both prevalent in and essential to most aspects of our lives. With the rapid growth of emotion-rich textual content, such as microblog posts, Facebook posts, blogs posts, and forum discussions, such content can be used to unobtrusively identify and track people's emotions expressed in text. Social networks and micro-blogging tools such as Twitter allow individuals to express their opinions, feelings, and thoughts on a variety of topics in the form of short text messages. These short messages (commonly known as tweets) may also include the emotional states of individuals (such as happiness, anxiety, and depression) as well as the emotions of a larger group. In this research work, the sentiment is aimed to overcome the problem of automatically classifying user tweets into positive opinion and negative opinion. The classifier Naives Bayes (NB) used in this study is a machine learning technique that is popular text classifiers. Therefore, we proposed Multiclass Hierarchal Emotion based Classification using text mining applications to classify user tweets. Proposed method provides an effective way to immediately and accurately categorize multiclass sentiment tweets classification without

need of exterior data, outperforming a content-based approach. The implementation of the proposed concept is provided using the JAVA environment. Additionally the comparative performance is also compared with traditional. In order to compare the performance of the algorithms the accuracy, error rate, memory consumption and time consumption is taken as standard parameters.

### References

1. Xu, Hua, Weiwei Yang, and Jiushuo Wang. "Hierarchical emotion classification and emotion component analysis on Chinese micro-blog posts." *Expert systems with applications* 42.22 (2015): 8745-8752.
2. Mining, What is Data, "Data Mining: Concepts and Techniques." Morgan Kaufmann (2006).
3. Han, J., and Kamber, M., *Data mining: Concepts and techniques*, Morgan-Kaufman Series of Data Management Systems San Diego: Academic Press, 2001.
4. Neelam adhab Padhy, Dr. Pragnyaban Mishra and Rasmita Panigrahi, "The Survey of Data Mining Applications and Feature Scope, *International Journal of Computer Science, Engineering and Information Technology (IJCEIT)*", vol.2, no.3, June.
5. Dheeraj Agrawal, "A Comprehensive Study of Data Mining and Application", *International Journal of Advanced Research in Computer Engineering & Technology (IJARCET)*, Volume 2, Issue 1, January 2013.
6. Delmater R and Hancock M, *Data Mining explained-a manager's guide to customer-centric business intelligence* (Digital Press, Boston) 2002.
7. Aakanksha Bhatnagar, Shweta P. Jadye, Madan Mohan Nagar" *Data Mining Techniques & Distinct Applications: A Literature Review*" *International Journal of Engineering Research & Technology (IJERT)* Vol. 1 Issue 9, November- 2012
8. Industry Application of data mining, available online at: <http://www.pearsonhighered.com/samplechapter/0130862711.pdf>
9. Jiban K Pal, "Usefulness and applications of data-mining in extracting information from different perspective", *Annals of Library and Information Studies*, Vol-58, March 2011, pp. 7-16.
10. Miss Latika Kaushik, "Text Mining - Scope and Applications", *Journal of Computer Science and Applications*, Volume 5, Number 2 (2013), pp. 51-55
11. A.H. Tan, *Text Mining: The State of the Art and the Challenges*, in *PAKDD99 Workshop on Knowledge Discovery from advanced Databases*, Beijing, China, April 1999.
12. Nahm U.Y. e Mooney R.J., *Using Information Extraction to Aid the Discovery of Prediction Rules from Text*, in *KDD2000 Workshop on Text Mining*, Boston, Massachusetts, USA, and August 2000.
13. Dr. S. Vijayarani Ms. J. I lamathi and Ms. Nithya, "Preprocessing Techniques for Text Mining - An Overview", *International Journal of Computer Science & Communication Networks*, Volume 5(1), pp. 7-16
14. Vishal Gupta, "A Survey of Text Mining Techniques and Applications", *Journal of Emerging Technologies in Web Intelligence*, Vol. 1, No. 1, August 2009
15. Li, J. & Khan, S. U. 2009. *MobiSN: Semantics-based mobile ad hoc social network framework*, In *Proceedings of IEEE Global Communications Conference (Globecom)*, Honolulu, HI, USA.

## Index Terms

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## Keywords

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