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Opinion Mining on Twitter Data using Machine Learning: A Case Study

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Abstract: *Sentimental analysis, also referred to as opinion mining or emotion extraction is the classification of emotions within a textual data. This technique has been widely used over the years in order to determine the sentiments, emotions within a particular textual data. Twitter is a social media platform that has been mostly used by the people to express emotions for particular events. In this paper we have collected the tweets automatically in a csv file for a number of events, analyzed them using a number of machine learning algorithms like Multinomial Naïve Bayes, Logistic regression, TF-ID vectorizer, Decision tree classifier and Support vector machine(SVM) and then compared the results. And also the exploratory Data analysis for positive, negative and neutral results are displayed by Bar graph, heat map, scatter plot, word cloud and a line graph.*

Keywords: Twitter sentiment analysis; supervised approach; Multinomial naïve bayes; Logistic regression; Decision tree; SVM; TF-ID Vectorizer

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