



**PROJECT REPORT**  
**COMPARING LOGISTIC REGRESSION AND NAÏVE  
BAYES ALGORITHM FOR DEPRESSION  
IDENTIFICATION FROM SOCIAL MEDIA USAGE**

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## ABSTRACT

*Social media has changed how people live today, bringing positive and negative effects on their mental health. It can get the user addicted, anxious, feeling alone, and depressed which affects their relationships and responsibilities in real life. A Lot of studies use the Naïve Bayes Algorithm for detecting mental health problems but the Logistic Regression Algorithm is used the least. Some studies show that Naïve Bayes has a high accuracy, reaching 92.5%. This study aims to compare both the Naive Bayes Algorithm and Logistic Regression to detect mental health problems through social media usage. The datasets this study uses are 481 user data obtained from Kaggle containing their use of social media patterns and mental health conditions. By using both Naïve Bayes and Logistic Regression, this study hopes to analyze depression signs by the users' social media usage and to find which algorithm performs the best in terms of accuracy, precision, recall, and F1 scores.*

*Keywords: Social Media, Mental Health, Naïve Bayes, Linear Regression, Data Mining*

