

# Depression Detection using Machine Learning Algorithms

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**Abstract:** Depression is one of the most common terms we have experienced among children, adults, students, professionals, the elderly and especially the young. cause. It is necessary to consult a doctor. Before the depression can be cured, it is necessary to diagnose whether the person has depression. People think they're depressed when they're a little nervous, so this study is supposed to predict whether a person is depressed. Machine learning algorithms are used to detect depression. This study has six different machine learning classifiers that use a variety of sociodemographic and psychosocial information to determine whether a person is depressed. Machine learning classifiers such as Chatbots, Logistic Regression, Naive Bayes, Decision Trees, Random Forests, SVMs (Support Vector Machines), KNNs (k Nearest Neighbors) are applied, with sensitivity, specificity and accuracy as measures of performance parameters It will be added. After applying different methods, I found that the classes in the confusion matrix are unbalanced. The analysis showed that Random Forest achieved his highest accuracy of 84% in predicting depression.

**Keywords:** Depression, classifiers, machine learning Algorithms, Accuracy

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