NARASARAOPETA ENGINEERING COLLEGE

(Autonomous)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Batch Number	BB9
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Guide	Dr.S.N.Tirumala Rao,(M.tech.,ph.D)
Title	**Prediction of Mental Health**
Domain/Technology	Machine Learning
Dataset Link	https://www.kaggle.com/code/kairosart/machine-learning-for-mental-health-1/input
Base Paper Link	https://ieeexplore.ieee.org/document/9545061
Software Requirements	Browser: Any Latest browser like Chrome Operating System: Windows 10 Language: Python Platform: IDLE
Hardware Requirements	Processor: Intel(R) Core(TM) i3-1005G1 CPU @ 1.20GHz 1.19 GHz or more RAM: 8GB System Type: 64-bit operating system, x64-based processor
Abstract	Suicide is the 2nd leading cause of death in the world, for those aged 15-24 and about 800,000 victims of suicide yearly (all age), which is about 40 per second. Behavioural health disorder, explicitly depression, are the type of health concerns, not many are aware of. There is no way one can get treatment of something they are not aware of. So, classifying potential health disordered person is the first step towards prevention. Lifestyle is something which defines individual the best. Lifestyle including Income, age group, martial status, child, property owned, alcohol or tobacco consumption, medical expenditure, insurance or other type of investment and many more. Using 76 such kind of attributes, model will predict if the individual is victim of depression or not. The proposed model has used eight mainstream ML calculation methods, namely (Decision tree (DT), Random Forest(RF), Support Vector Machine(SVM), Naïve Bayes(NB), Logistic Regression(LR), XGBoost(XGB), Gradient Boosting Classifier(GBC) and Artificial Neural Network(ANN) to build up the expectation models utilizing a huge dataset (1429 individual's survey), bringing about precise and productive dynamics. By using various strategies and different model, this research work has attempted to get a clear and precise picture. The reason to follow various approaches is that, precise the information, work in a better way and reduce the number of suicide case. The final outcome received was 87.38 percent, which was using Support Vector Machine (SVM).

Signature of the team members **Signature of the Guide** **Signature of the project coordinator**