# DEPRESSION DETECTION IN TWITTER

PROJECT PROPOSAL

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## I. INTRODUCTION

Depression is a common form of disability that negatively affects the way someone think and act. It can result in the loss of interest in those activities you once enjoyed. It leads to various emotional and physical problems and can affect your ability to do things. Above 400 million people suffer from depression and out of that, a fraction of people needs medical treatment to cure it. It is becoming the leading cause of suicides and death, even in teen ages.

Most of the youngsters use social media. Hence social media is one of the platforms to identify early stages of depression, especially in youth. Every second, more than 6K tweets are generated on twitter, that results in around 250 billion tweets per year. This project identifies and analyses textual markers associated with the depression symptoms in order to create an algorithm that effectively predicts depression. Hence, by creating an algorithm which can analyse tweets and can be used by medical professionals.

#### II. ANALYSIS

We will be using tweets indicating depression by using a twitter scrapping tool TWINT. We will be using few terms related to depression for scrapping. However, the tweets which are scrapped may have some tweets related to articles about depression, which is not significant for our analysis. Hence, we will be manually filtering out those tweets. We will be using VADER sentiment analysis tool for the general analysis of tweets. VADER helps in tweet classification as well as can measure the intensity of the sentiment. We will use tweets from Kaggle to test the model.

### III. TEAM RESPONSIBILITIES

Anto Francis	Tweet scrapping
Omer Volkan	Tweet cleaning and manual
	checking
Rupesh Chandran	VADER Analysis
Sachin Sreekumar	Tweet scrapping, Manual
	checking, VADER analysis

#### REFERENCES

[1] Stephen, J. J., & P., P. Detecting the magnitude of depression in Twitter users using sentiment analysis. International Journal of Electrical and Computer Engineering (IJECE), 9(4), 3247. https://doi.org/10.11591/IJECE.V9I4.PP3247-3255