Depression Level Detection Using Machine Learning

Methodology:

We will use CNN for depression detection. We have collected dataset from well-known source. The dataset is well processed so we will not have to use preprocess method to process the dataset. We will not consider column A and B which are survey id and village id for detecting depression as they are not relevant for the process. We will take data column like sex, age, Married, Number_children, education_level, total_members, gained_asset, durable_asset, save_asset, living_expenses, other_expenses, incoming_salary, incoming_own_farm, incoming_business, incoming_no_business, incoming_agricultural, farm_expenses, lasting_investment, depressed. In sex column the value 1 represent male and the value 0 represents female. And in depressed column the value 0 meant no depression detected and 1 means depression detected.

We will use python in this project. Python is a general purpose programming language. Python is most suitable for machine learning. Python is more consistency and simplicity than other programming language. Here we will use numpy python library. numpy contains a multi-dimensional array and matrix data structure. It can be utilised to perform a number of mathematical operation on array such as statistical, trigonometric. We will use pandas python library function. Pandas is mainly used for data analysis. Pandas allows various importing data from various file formats. We will use keras library function it is used for deep learning it allows first calculation and prototyping. First we will read the dataset then we will keep the dataset in x and y variables. We will keep 2 to 21 column of x variable and we will keep column number 22 of y variable. we have left out the first two column because first two column is not necessary for calculation then we will train and test the data set.