Predicting Life Expectancy Using Machine Learning

Machine Learning is the field of study that gives computers the ability to learn without being explicitly programmed. In machine learning, we take on a dataset to work on which is divided into train data and test data. In the training process, we use the train data to train the model and later check/predict the output on the test data.

Project Summary

The project aims to predict the average life expectancy of people living in a country based on past data. First, we'll import the dataset having features such as year, GDP, education, alcohol intake, expenditure on the healthcare system, and other features. The dataset used in this project is a CSV file, which is taken from kaggle.com provided by World Health Organization (WHO). We'll be using the regression model to predict life expectancy. After training the model, we provided new data to which the model has to make a prediction.

Project Requirements

The requirement for the project is a dataset that contains features for predicting life expectancy such as country, year, staus, adult mortality, infant deaths, etc. Based on these features, the life expectancy of a country will be predicted.

Functional Requirements

- Regression Modelling using sample data
- Machine Learning algorithm that learns machine behavior i.e learns to predict itself

Technical Requirements

- Optimization of model parameters to minimize a cost function
- Memory capacity and bandwidth for faster training and prediction

Software Requirements

- Python
- Python libraries like numpy, pandas, etc
- Tensorflow - machine learning framework

Project Team

- Saurav Chaudhary

Project Schedule

Start Date: 1st June 2020
End Date: 30th June 2020