

Comparison of Machine Learning Algorithms for Early Prediction of Diabetes

Diabetes has evolved as one of the most dangerous threats to the human world. People having diabetes have a high risk of complicated diseases like heart disease, kidney disease, stroke, eye problem, nerve damage, etc. About 422 million people were affected by diabetes disease worldwide in 2014. The figure will be reached 642 million in 2040. Thus, early diagnosis and treatment are required to prevent diabetes and its associated health problems. This work aims to assess the risk of diabetes among individuals based on several relevant clinical variables like age, obesity, lack of exercise, hereditary diabetes, lifestyle, bad diet, high blood pressure, family background, etc. Machine learning can play a significant role in the early detection of diabetes. Healthcare industries have large volume databases. Using machine learning techniques, one can study huge datasets and find hidden patterns to discover knowledge from the data and predict outcomes accordingly. The main aim of this project is to apply several machine learning algorithms to determine how well they predicted a patient's odds of developing diabetes.

Required Background:

- Machine learning
- Statistics

Required Programming Skill:

- Python
- Keras/Tensorflow