

ML

Supervised Learning

Project: Diabetes Prediction

Conclusions

- For this project the target was to predict: “diabetes or not diabetes” using machine learning models
- The following were the variables available in the data set: Pregnancies, Glucose, Blood Pressure, Skin Thickness, Insulin , BMI, Diabetes Pedigree Function, Age and Outcome.
- “Outcome” was defined as the target to be predict.
- After analysis it was identified that Glucose had a higher correlation with the target.
- “Glucose” was the variable to be use as predictor.

Conclusions (Continuation)

- For this project, 4 different machine learning models were used to predict diabetes. The models used were Random Forest, Decision Tree, SVM and Logistic Regression .
- After trying different parameters with the models it was observed a similar accuracy among them. Accuracy calculates the number of correct predictions made by the model. Accuracy results as follow:
 - .77 SVM
 - .76 Logistic Regression
 - .73 Decision Tree
 - .72 Random Forest
 - Accuracy calculates the correct
- For future analysis more features can be added to the models to try to improved accuracy.

Correlation Matrix

