Accuracy of Diabetes Patient Determination: Prediction Made from Sugar Levels Using Machine Learning

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- Sujatha Krishnananthan (1)
- Puvanendran Sanjeeth (2)
- Rukshani Puvanendran (3)

1. Post Graduate Institute of Science, University of Peradeniya, , Kandy, Sri Lanka
2. Sri Lanka Institute of Information Technology, , Colombo, Sri Lanka
3. Department of Information and Communication Technology, University of Vavuniya, , Vavuniya, Sri Lanka

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Abstract

This study focuses on the prediction of the Diabetic Patients through the sugar levels. The Dataset is analyzed using the data mining techniques such as feature extraction, associate rule mining and classification. The Fast Blood Sugar (FBS) and Post-Prandial Blood Sugar (PPBS) sugar levels are selected as the important features, identification of a rule depending on the selected feature is identified and the performance metric for three classifiers is analyzed based on the selected attributes and choose the classifier with high accuracy. Classification algorithms like random forest, decision tree (J48), and Naïve Bayes were utilized to identify the patients with diabetes disease. The performance of these techniques is considered using the factors relating to the accuracy from the applied techniques. The accuracy is seeming to be higher for Naïve Bayes. The outcomes acquired demonstrated that Naïve Bayes outflanks from different strategies with most noteworthy precision of 74.8%.

Keywords

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