Abstract

Machine learning algorithms can help us to detect the onset diabetes. Early detection of diabetes can reduce patient’s health risk. Physicians, patients, and patient’s relatives can be benefited from the prediction’s outcomes. In low resource clinical settings, it is necessary to predict the patient’s condition after the admission to allocate resources appropriately. Several articles have been published analyzing Prima Indian data set applying on various machine learning algorithms. Shankar applied neural networks to predict the onset of diabetes mellitus on Prima Indian Diabetes dataset and showed that his approach for such classification is reliable [4, 5 and 6]. Machine learning techniques increase medical diagnosis accuracy and reduce medical cost [2, 3]. In this study, the main focus is to investigate different types of machine learning classification algorithms and show their comparative analysis. The purpose of this study is to detect the diabetic patient’s onset from the outcomes generated by machine learning classification algorithms.
4. Shibendra Pobi and Lawrence O. Hall. Predicting Juvenile Diabetes from Clinical Test Results. 2006 International Joint Conference on Neural Networks, Sheraton Vancouver Wall Centre Hotel, Vancouver, BC, Canada, July 16-21, 2006.


Index Terms

Computer Science Biomedical

Keywords

Machine Learning, SVM, Naive Bayes, Logistic Regression, J48, OneR.