PERFORMANCE EVALUATION OF DIFFERENT MACHINE LEARNING ALGORITHMS FOR PREDICTION OF CHRONIC KIDNEY DISEASE

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ABSTRACT

Chronic kidney disease is rising health hassles and includes stipulations that minimize the efficiency of renal features and that damage kidneys. Chronic kidney sickness may be detected with countless machine learning techniques, and these have been classier. The use of a number features and classier combinations.

Methods: In this study, we applied 12 one of a kind of machine learning classifiers (Naïve Bayes, RandomTree, REPTree, etc.) for the analysis of Chronic kidney disease. The classification performances are evaluated with five different overall performance metrics, i.e., accuracy, kappa, Mean absolute error (MAE), Root Mean square error (RMSE) and F-measures. The goal of this lookup work is to predict kidney disease with the aid of using more than one computing machine learning algorithms that are J48 Graft Decision tree (C4.5) and Bayesian Network (BN) and LMT, LAD Tree, Random Tree and Random Forest, etc.

Results: The machine learning algorithms under study were able to predict liver disease in patients with accuracy between 76.13% and 83.41%.

Conclusions: It was shown that Random forest has better Accuracy (83.41%) when compared to different machine-learning algorithms.

KEYWORDS: Chronic Kidney Disease, Classification, Machine Learning Algorithms, Bayesian Network, Random Fores