

## LITERATURE SURVEY:

[Muhammad MinoarHossain](#) [Reshma AhmedSwarna](#) [RafidMostafiz](#) [PabonShaha](#) [Lubna](#) [YasminPink](#) [Mohammad](#) [MotiurRahman](#) [WahidurRahman](#) [Md. SelimHossain](#) [Md. EliasHossain](#) [Md. SadiqIqbal](#) (2002) The efficiency of [ML techniques](#) depends on the selection and use of the appropriate features. Hence, this research analysis several feature optimization approaches along with a max voting ensemble model to establish a highly accurate CKD diagnosis system by using an appropriate feature set. The ensemble model of this research is structured with five existing [classifiers](#). Three types of feature optimization namely feature importance, feature reduction, and feature selection where for each approach two most proficient techniques are analyzed with the mentioned ensemble model. The most outstanding result of 99.5% accuracy by using 10-fold cross-validation

Manal A Abdel-Fattah Nermin Abdelhakim Othman Nagwa Goher(2022) The feature selection techniques, namely, Relief-F and chi-squared feature selection method, were applied to select the important features. Six machine learning classification algorithms were used in this research: decision tree (DT), logistic regression (LR), Naive Bayes (NB), Random Forest (RF), support vector machine (SVM), and Gradient-Boosted Trees (GBT Classifier) as ensemble learning algorithms. Four methods of evaluation, namely, accuracy, precision, recall, and F1-measure, were applied to validate the results. For each algorithm, the results of cross-validation and the testing results have been computed based on full features, the features selected by Relief-F, and the features selected by chi-squared feature selection method. The results showed that SVM, DT, and GBT Classifiers with the selected features had achieved the best performance at 100% accuracy

[Diddi Priyanka](#),[Diddi Anusha](#),[T. Anandhi](#),[P. Indria](#),[E. Brumancia](#) & R. M. Gomathi(2002) The examination of dataset by directed supervised machine learning technique (SMLT) to catch a few data resembles, variable recognizable proof, uni-variate investigation, bi-variate and multi-variate investigation, missing worth medicines and break down the information approval, information cleaning/getting ready, and information perception will be done on the whole given dataset. To classifying information from need, and the outcome shows

that the adequacy of the proposed AI calculation method can be contrasted and best exactness with accuracy, callback

Ahmed J. Aljaaf; Dhiya Al-Jumeily; Hussein M. Haglan; [Mohamed Alloghani](#) [Thar Baker](#) Abir J. Hussain Jamila Mustafina(2018).This study starts with 24 parameters in addition to the class attribute, and ends up by 30 % of them as ideal sub set to predict Chronic Kidney Disease. A total of 4 machine learning based classifiers have been evaluated within a supervised learning setting, achieving highest performance outcomes of AUC 0.995, sensitivity 0.9897, and specificity 1.

Saurabh Pal(2022) The purpose of the proposed study is to develop and validate a predictive model for the prediction of chronic kidney disease. Machine learning algorithms are often used in medicine to predict and classify diseases. Medical records are often skewed. They have used chronic kidney disease dataset from UCI Machine learning repository with 25 features and applied three machine learning classifiers Logistic Regression (LR), Decision Tree (DT), and Support Vector Machine (SVM) for analysis and then used bagging ensemble method to improve the results of the developed model. The clusters of the chronic kidney disease dataset were used to train the machine learning classifiers. the Kidney Disease Collection is summarized by category and non-linear features. We get the best result in the case of decision tree with accuracy of 95.92%. Finally, after applying the bagging ensemble method we get the highest accuracy of 97.23%.

[Minhaz Uddin Emon](#) [Mahmud Imran](#) [Rakibul Islam](#) [Maria Sultana Keya Raihana Zannat Ohidujjaman](#) (2021) They take a few attributes to measure our analysis about chronic kidney disease and this attribute is one of the major occurrences of chronic kidney disease. Therefore 8 machine learning classifier are used to measure analysis using weka tools namely: Logistic Regression (LG), Naive Bayes (NB), Multilayer Perceptron (MLP), Stochastic Gradient Descent (SGD), Adaptive Boosting (Adaboost), Bagging, Decision Tree (DT), Random Forest (RF) classifier are used. They feature extraction of all attributes using principal component analysis (PCA). We gain the highest accuracy from the Random Forest (RF) and it is 99 % and ROC (receiver operating characteristic) curve value is also highest from other algorithms.