## LITERATURE SURVEY

## EARLY DETECTION OF KIDNEY CHRONIC DISEASE USING MACHINE LEARNING

❖ [J. Snegha, 2020][10] proposed a system that uses various data mining techniques like Random Forest algorithm and Back propagation neural Network. Here they compare both of the algorithm and found that Back Propagation algorithm gives the best result as it uses the supervised learning network called feedforward neural network.

- ❖ [Mohammed Elhoseny, 2019] described a system for CKD in which it uses Density based feature selection with ACO. The system uses wrapper methods for feature selection.
- ❖ [Baisakhi Chakraborty, 2019][9] proposed development of CKD prediction system using machine learning techniques such as K-Nearest Neighbor, Logistic Regression, Decision Tree, Random Forest, Naïve Bayes, Support Vector Machine and Multi-Layer Perceptron Algorithm. These are applied and their performance are compared to the accuracy, precision, and recall results. Finally, Random forest is chosen to implement this system.
- ❖ [Arif-Ul-Islam, 2019] proposed a system in which prediction of disease is done using Boosting Classifiers, Ant-Miner and J48 Decision Tree. The aim of this paper is two fold that is, analyzing the performance of boosting algorithms for detecting CKD and deriving rules illustrating relationships among the attributes of CKD. Experimental results prove that the performance of AdaBoost was less that of LogitBoost by a fraction.

- ❖ [S.Belina V, 2018] proposed a system that uses extreame learning machine and ACO for CKD prediction. Classification is done using MATLAB tool and ELM has few constraints in the optimization. This technique is an improvement under the Sigmoid additive type of SLFNs.
- ❖ [Siddheshwar Tekale, 2018][8] described a system using machine learning which uses Decision tree SVM techniques. By comparing two techniques finally concluded that SVM gives the best result. Its prediction process is less time consuming so that doctors can analyze the patients within a less time period.
- ❖ [Nilesh Borisagar, 2017] described a system which uses Back Propagation Neural Network algorithm for prediction. Here Levenberg, Bayesian regularization, Scaled Conjugate and resilient back propagation algorithm are discussed. Matlab R2013a is used for the implementation purpose. Based on the training time, scaled conjugate gradient and resilient back propagation are found more efficient than Levenberg and Bayesian regularization.
- ❖ [Guneet Kaur, 2017][7] proposed a system for predicting the CKD using Data Mining Algorithms in Hadoop. They use two data mining classifiers like KNN and SVM. Here the predictive analysis is performed based upon the manually selected data columns. SVM classifier gives the best accuracy than KNN in this system