

5. RECOMMENDATIONS

ANFIS and Adaptive based KNN algorithms perform the classification with a higher efficiency and reduced complexity. Amalgam KNN extracts both the feature of KNN and K means algorithms. Since the current accuracy of both ANFIS with adaptive based KNN and amalgam KNN is greater than 80 %, they can be combined to produce a better accuracy algorithm than the existing one. Finally Co- active ANFIS which combines both the features of adaptive neural networks and fuzzy systems which is termed as the successor of ANFIS can also be used to improve the performance of the present algorithm. Their conjoint dependence provides astonishing abilities for learning. CANFIS provides non linear rules for classification, prediction and diagnosis among the input output pairs. Results should be compared and tested with the increased values of k. Greater the k value, more will be accuracy rate.

6. CONCLUSION

Data mining and machine learning algorithms in the medical field extracts different hidden patterns from the medical data. They can be used for the analysis of important clinical parameters, prediction of various diseases, forecasting tasks in medicine, extraction of medical knowledge, therapy planning support and patient management. A number of algorithms were proposed for the prediction and diagnosis of diabetes. These algorithms provide more accuracy than the available traditional systems. This paper includes algorithms like Expectation Maximization Algorithm, K Nearest Neighbor algorithm, K-means algorithm, Amalgam KNN algorithm and Adaptive Neuron Fuzzy Inference System algorithm. From the observation EM possess the least classification accuracy and amalgam KNN and ANFIS provide the better classification accuracy results. Amalgam KNN comprises both the feature of KNN and K means. ANFIS in cooperates both the features of adaptive neural both ANFIS and amalgam KNN is used. Co active ANFIS was extended with some capabilities of its predecessor ANFIS to provide better classification and prediction accuracy. Classification shows better accuracy when the k value is increased to a large value.

References

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