





















## V. CONCLUSION

Various machine learning techniques are used to predict that whether the heart disease is present or not in this proposed system. The accuracy and performance of proposed system is analyzed using various tools. The result can be concluded that the more complex algorithms like decision tree and random forests generated better results compared to the basic ones. In most cases it is worth to emphasize that hyper-parameter tuning is essential to achieve robust results out of these techniques. Simpler methods have also proved to be useful as well by producing decent results. In medical field, machine learning had absolutely bright future. In a place where heart disease experts are not available, we may quite accurately predict whether a disease will occur or not with just basic information about a certain patient's medical history.

## REFERENCES

- [1] G Biau, "Analysis of a random forests model," *J.Mach.Learn. Res.*, Vol.13, pp.1063-1995, 2012
- [2] K. Srinivas, "Analysis of coronary cardio vascular disease and prediction of heart attack in coal mining regions using data mining techniques," *IEEE Trans. Comput. Sci. Educ. ( ICCSE)*. P. p(1344-1349), 2010
- [3] S. Thirumuruganathan. "A detailed Introduction to K-Nearest Neighbor (KNN) Algorithm" [Online]
- [4] R. Jing and Y. Zhang. "A View of Support Vector Machines Algorithm on Classification Problems". In : *Proc. Of 2010 International Conference on Multimedia Communications*, pp.13-16. 2010
- [5], S.Kiruthika Devi et al. – Prediction of Heart Disease using Data Mining Techniques, *Indian Journal of Science and Technology*, Vol 9(39), October 2016
- [6] V.Chauraisa and S.Pal. "Data Mining Approach to Detect Cardiac Vascular Disease," *Int. J. AdvComput Sci. Inf. Technol*, Vol. Vol 2, no. No. 4, p.pp 56-66., 2013
- [7] Q.J "Induction of decision trees." *Machine Learn. Vol. 1*, p.81-106, 1986