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Heart Disease Prediction using Python and Machine Learning Algorithm

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Abstract: *Coronary illness is one of the most serious sicknesses on the planet and it enormously influences the soundness of a singular awful. In coronary illness, the heart can't drive the expected measure of blood into different pieces of the circulatory system body. An exact and convenient analysis of coronary illness is significant in forestalling cardiovascular breakdown as well as treatment. Analysis of coronary illness by conventional clinical history has been viewed as untrustworthy in many regards. To recognize solid endlessly individuals with coronary illness, non-import-based strategies, for example, AI is dependable and compelling. In what is proposed for research, we fostered a machine-based indicative program for anticipating coronary illness utilizing coronary illness information. We have utilized seven famous AI calculations, a choice of three element calculations, inverse check strategy, and measurements to test the exhibition of seven such separators like class exactness, clearness, awareness, Matthews' connection coefficient, and execution time. The proposed framework can undoubtedly distinguish and separate individuals with coronary illness from solid individuals. Moreover, bends have the capability of the recipient and the bend under each bend is counted. We've discussed every one of the separators, calculations for choosing highlights, pre-handling techniques, confirmation strategies, and execution measurements for the classifications utilized in this newspaper. The presentation of the proposed framework is ensured in full highlights and in a diminished arrangement of elements. The decrease in factors adds to the presentation of the dividers relying upon the precision as well as time to make dividers. A proposed machine-based dynamic framework will assist doctors with diagnosing heart patients properly.*

Keywords: Heart disease prediction, Data mining, Decision tree, Naïve Bayes, K-NN, Random Forest, Machine learning

REFERENCES

[1]. Alkeshuosh A.H. Moghadam, M.Z. Mansoori, I AI, 2017. Diagnosis of Heart Disease., pp 306-311
[2]. R, T.P. Thomas, J., 2016. Human Heart Disease Prediction System using Data Mining Techniques.
[3]. Jpdlo, V. et al., 2018. Heart diseases prediction with Data Mining and Neural Network Techniques.,6(7 2), pp.1−6..
[4]. S. Radhimeenakshi, "Classification and prediction of heart disease risk using data mining techniques of Support Vector Machine and Naïve Bayes," 2016 3rd International Conference on Computing for Sustainable Global Development (INDIACom), New Delhi, 2016, pp. 3107-311
[5]. Brownlee, J. (2016). Naive Bayes for Machine Learning. Retrieved March 4, 2019,https://machinelearningmastery.com/naive-bayes-for-machine-learning/
[6]. Soodeh Nikan, Femida Gwadry-Sridhar, and Michael Bauer ―Machine Learning Application to Predict the Risk of Coronary Artery Atherosclerosis‖, IEEE, August 2016
[7]. Sowmiya, C., 2017. Analytical Study of Heart Disease Diagnosis Using Classification Techniques.
[8]. V.V. Ramalingam, Ayantan Dandapath, M Karthik Raja ―Heart disease prediction using machine learning tech: A survey‖ International Journal of Engineering & Technology, 7 (2.8), April 2018.
[9]. R. Alzubi, N. Ramzan, H. Alzoubi, and S. Katsigiannis, "SNPs-based hypertension disease detection via machine learning techniques," ICAC 2018 - 2018 24th IEEE Int. Conf. Autom. Comput. Improv. Product. through Autom. Comput., pp. 1–6, 2018.

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[10]. M. Gudadhe, K. Wankhade, and S. Dongre, "Decision support system for heart disease based on support vector machine and artificial neural network," 2010 Int. Conf. Comput. Commun. Technol. ICCCT-2010, pp. 741–745, 2010, doi: 10.1109/ICCCT.2010.5640377.

[11]. K. Thenmozhi and P. Deepika, "Heart Disease Prediction Using Classification with Different Decision Tree Techniques," Int. J. Eng. Res. Gen., vol. 2, no. 6, pp. 6–11, 2014.

[12]. P. P. R. Patil and P. S. A. Kinariwala, "Automated Diagnosis of Heart Disease using Data Mining Techniques," Int. J. Adv. Res. Ideas Innov, vol. 3, no. 2, pp. 560– 567, 2017.