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# **Heart Disease Detection using Machine Learning**

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Abstract: Heart sickness is one of the maximum full-size reasons of mortality in today's world. Heart sickness proves to be the main reason of loss of life for each male and female. This impacts the human life very badly. The analysis of coronary heart sickness in maximum cases relies upon on a complicated aggregate and huge extent of scientific and pathological records. Machine studying has been proven to be powerful assisting in making choices and predictions from the big amount of records produced through the fitness care industry. In this report, numerous conventional machine studying algorithms that goals in enhancing the accuracy of heart sickness prediction has been applied. In heart diseases, correct analysis is primary. But, the conventional approaches are insufficient for correct prediction and analysis. In order to use deep studying approach very big datasets are required which aren't to be had in clinical and scientific research. To address this issue, surrogate records is generated from Cleveland dataset. The generated artificial dataset is applied with conventional gadget studying algorithms as properly as with deep studying model. The expected outcomes display that there's an development in class accuracy. The generated artificial dataset performs a vital function to enhance the class prediction especially while coping with sensitive records.

**Keywords:** Heart disease, Machine learning, Feature correlation, Feature selection

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