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Effective Heart Disease Diagnosis Using Machine Learning Techniques

Sumanth M¹ and Adarsh M J² Student, Department of Computer of Application¹. Assistant professor, Department of Computer of Application². Jawaharlal Nehru New College of Engineering, Shivamogga, Karnataka, India

sumanthsumanth908@gmail.com and adarshmj@jnnce.ac.in

Abstract: Heart disorders, also known as Cardiovascular Diseases (CVDs), are one of the world's worst problems. They are invisible and strike without warning when the body's limits are reached. Every day, the health-care business generates a vast amount of data about patients and conditions. Researchers and workers, on the other hand, do not make proper use of this information. The healthcare sector today is rich in data but deficient in competence. There are a variety of data processing and machine learning approaches and tools available for extracting useful information from databases and using that information to make more accurate predictions and decisions. The main idea of this research paper is to summarize recent research on heart disease prediction with comparative results, as well as to draw analytical conclusions and reduce the amount of attributes utilized in heart disease diagnosis, which may result in fewer tests being required. that a patient must undergo. Our effort also aims to improve the proposed system's efficiency. Electrocardiograms are a non-invasive and low-cost approach to diagnose cardiac problems (ECG).

Keywords: Cardiovascular disease, ECG, Data mining, Electrocardiogram, Support Vector Machines, K-Nearest Neighbor; Naïve Bayes, Decision Trees.

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