DETECTION OF ABNORMAL MYOCARDIAL ACTIVITY USING PATTERN SEARCH ALGORITHM

PROJECT WORK II REPORT

Submitted by

KOWSHIKA S - 92132236002

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DINDIGUL-624622

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ABSTRACT

Heart disease is a leading cause of death globally. A type of heart disease, Myocardial Infraction is caused when the blood flow to a portion of heart is decreased or completely blocked which causes muscles to die off from lack of oxygen. Myocardial Infraction is silent and often go undetected which may cause sudden death to the patient. Early Detection of the disease is important to save lives. Electrocardiogram (ECG) is used to monitor heart's function, any changes in an ECG signal can be a sign of heart-related conditions. In order to find the abnormality in the heart, the ECG signal should be analysed. In the proposed system, the abnormality in the ECG signal is detected. The ECG data is collected from MIT-BIH arrhythmia dataset. The comparative analysis is systematically evaluated through pattern search algorithm (PSA). A sum of absolute mean (SAM) is calculated and compared with a comparator with threshold values. These values helps to determine the input data as normal or abnormal data.