

ABSTRACT:

Electrocardiogram (ECG) recognition is an important method for detecting different heart signals which helps in identifying the abnormal ECGs. It detects and records the points and timing of the electrical activity of heart. This information is noted on a graph that shows each stage of the electrical signal as it travels through your heart. Presently available ECG detection methods used are ranging from academic research to commercial ECG technologies. These methods are not capable to separate normal and abnormal ECG signals, especially, in ECG signals that are similar in terms of figure. Therefore, this work offers a technique that will separate the abnormal signals from the normal signals which will be immensely accurate for ECG signals classification.

We are going to take ECG data and by sampling and filtering we detect ECG signal's main features like HRV, P, Q, R, T and QRS slopes as well as the duration between them. Duration has been calculated between each feature. Noise will be removed by applying the filters.

Our suggested algorithm will mostly attain 95% of accuracy, sensitivity 88%, and 79% specificity. The results that are in thesis will prove that our proposed method is accurate as compared to the competitive recognition approaches.