ECG ANALYSIS SYSTEM TO DETECT ARRHYTHMIA(S) USING HIGH LEVEL LANGUAGE

CHANDRASHEKHAR V. GHULE AND D. G. WAKDE

Abstract

In this paper emphasis has been to analyze the ECG signal using higher level language C++. All the required filters such LPF, HPF, Notch Filters, Baseline Wandering are designed effectively in C++. Other parameters like RR interval, Heart Rate Detection, QRS Complex Interval, ST interval etc have been analyzed to detect the various types of arrhythmias. It has been found that arrhythmia such as Tachycardia, Bradycardia, Trigeminy, Bigeminy; VPC can be detected accurately using the software developed. GUI has also been designed for displaying s12 lead ECG signal, Heart Rate, types of arrhythmias, record of patients.