A New Robust Technology of Heart Beat Counting using Transformation by using MATLAB

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Abstract

This paper presents a new approach to count heart beat from ECG signals. This work is carried out using the Wavelet Transform. The signals were acquired using an MATLAB SIMULATION of bioelectrical. The ECG signals are obtained through the implant of electrodes connected to a channel of the front-end board. The cardiac rhythm is then obtained using an optic dactilar sensor connected to an independent channel of the ECG signal. In order to get a better identification of the acquired the Wavelet family db, sym, coif4 and bior 1.1 were chosen, primarily because its scaling function is closely related to the shape of the ECG, fitting very well with the applications constraints. The processed signals were further analyzed using SIMULATION using MATLAB. The application to count hear beat from the ECG signals was developed by MATLAB 2008Rb and is capable of graphically representing the data before and after it's processed.

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Index Terms

Computer Science
Signal Processing

Keywords

ECG,Db,sym,coif4,bior1.1 and transform.