Paper Title

(6)Automatic Detection of Cardiac Arrhythmia through ECG Signal Analysis: A Review

1. **Preprocessing: Filtering & Segmentation**

First used the simplest and most widely used is the

implementation of recursive digital filters of the finite impulse response (FIR) , However the main problem is that the frequency of the noise is not known always. This problem is solved by used the Least Mean Square (LMS) filter to de-noise the ECG signal in an adaptive fashion. However, this technique has constraints and does not offer great advantages over the FIR digital filters.

In the last decade, used Discrete Wavelet Transform (DWT).

1. **Feature Extraction**

Continuous Wavelet Transform (CWT), is not largely used due to the fact that its implementation and its inverse are not available in standard toolboxes

(such as MATLAB wavelet Toolbox) and CWT should be carefully discretized for the use as a CWT analyzer.

1. **Classification & Classifier**

the ANN and SVM techniques

1. **Accuracy**
2. **Two Leads or One Lead ? In case of two leads .. how classification of two leads is merged to have final decision ?**
3. **Classes**