Abstract

Atrial Fibrillation (AF) An abnormality in heart rate that can indicate another potentially fatal disease. There have been quite a number of previous studies discussing the topic of extracting AF features from ECG signals, but no one has yet known the best wavelets for feature extraction from ECG signals resulting from patient records. In this research focuses on feature extraction testing using two wavelets, Daubechies wavelet and Haar wavelet. Both of these wavelets were chosen because they are generally used to extract ECG signals in previous related research. AF can be known from ECG signals that have been processed in advance, such as noise removal, feature extraction, and classification. The feature extraction process is needed to find out the information contained in the ECG signal. Pre-processing used is Band Pass filter, Derivative Filter, Squaring, and Moving Window Integrator. The test is divided into four, namely with and without filters, from each part tested two R-peak detection formulas. The results obtained by Haar and Daubechies have results that are not much different. both also have varied results. But in this case Daubechies are superior with the highest value of 100% accuracy, sensitivity 100%, specificity 100%.

Keywords: atrial fibrillation, beat threshold