In this paper, the wavelet method used for detecting an electrocardiogram signal is the detection of a new wavelet. Specific form of the electrocardiogram signal which gives angle, amplitude, phase and certain frequency is used as the basis of new wavelet formation. Algorithm DeGePVC is a new algorithm to detect Premature Ventricular Contraction wave electrocardiogram signal. The advantage of using this algorithm DeGePVC is reducing the sensitivity to noise compared to other techniques, with the determination of each component of P, Q, R, S, T wave of the electrocardiogram accurately and quickly. The originality of this study was applied to Premature Ventricular Contraction electrocardiogram wave, with varying leads and it is analyzed for each component of its electrocardiogram signal. The results show the effectiveness of DeGePVC wavelet algorithm utility to detect Premature Ventricular Contraction electrocardiogram wave for 6 lead electrocardiogram. With the value of auc=0.988 by using Receiver Operating Characteristic (ROC) curve.
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