

Studi Algoritma Ekstraksi Fitur Supraventricular Tachycardia Menggunakan Metode Haar Wavelet Transform dan Daubechies Wavelet Transform

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Abstract

Supraventricular tachycardia (SVT) is one of the beat rhythm disorders of the heart beating faster than normal which originates from electrical impulses in the heart of the heart or atrium (the space above the heart chambers or ventricles) namely the AV node. Each blood volume in an organ of the body will change due to pumping of blood by the heart. The high number of deaths from heart disease is due to the lack of cardiologists and technology to handle it.

Because this research uses Haar Wavelet Transform and Daubechies Wavelet Transform methods it can be ascertained that the two methods have different levels of accuracy, sensitivity and specifications. From the methods mentioned above there must be the best of the two methods.

Therefore in this research, which is to compare the two things to find out which is better than the method used.

From the results obtained by the Haar Wavelet Transform method and the Daubechies Wavelet Transform method using SVM classification methods that use the kernel, have result that do not differ much, both also have varying results. But in this case the Daubechies DWT Level 1 method using the SVM RBF classification method is superior with an accuracy value of 95%, a sensitivity value of 100% and a specificity value of 91,33%.

Keywords: Supraventricular tachycardia, ECG, Haar Wavelet Transform, Daubechies Wavelet Transform