Abstract

SVT or Supraventricular tachycardia, It is one of the types of heart rhythm disorders, where the heart beats faster than normal, which is sourced from electrical impulses in the heart or atrial foyer (space above the heart or ventricle chamber), which is a lymph AV. SVT conditions occur when the electrical impulses that regulate the heartbeat do not work normally. As a result, the heart beats so fast that the heart muscle cannot loosing on the sidelines of the contraction. When the condition occurs, the cardiac ventricle cannot contract strongly so that it cannot meet the needs of the body's blood supply, including the brain. This condition can make the sufferer feel giddy or faint.. SVT occurs when the heart beats 150-250 beats per minute (bpm) while the normal is 60-100 BPM. To find out if someone is experiencing SVT or not, then using a signal recorder called electrocardiogram (ECG). There has been a lot of research using various methods to classify the signal EKG recording results but the study in classification to detect the disease arrhythmia SVT still has a low accuracy value, so it is necessary to do more research Further. To overcome this problem, testing and performance analysis of classification algorithm to detect SVT disease consisting of two methods namely Support Vector Machine (SVM) and K-Nearest Neighbor (KNN). Then create an ECG prototype to perform real-time heart signal recording and detect SVT disease by implementing the selected algorithm. SVM with Linear Kernel Algorithm is the most high accuracy result of 90%, sensitivity 75% and specificity 100%. So the SVM with Linear Kernel algorithms the best method.