

ABSTRACT

Less of awareness about heart health, high stress levels, unhealthy lifestyle and often eating junk food can lead to various health disorders of heart. One of them is a disorder of the heart arrhythmias Premature Atrial contractions (PACs). PACs is a contraction of events that appear early and come from the heart of the trigger source (pacemaker) SA node that preceded the emergence premises P wave followed by a wave of the QRS complex and the T wave. Detectors and premature heart problems PACs by using ECG. ECG is the electrical activity that produces waves in the form of P wave, QRS complex and T wave

In the previous research, detection PACs have been made by the same method, but the research is still in the form of data, and in this final project will be applied using the software with the Java programming language installed on Android-based smartphone.

In this final project was designed a software to detect heart disorders PACs using the RR interval, and QRS Detection algorithm Pan and Tompkins. Designing detection software PACs on this android based smartphone, can make it easier for the early detection of heart disorders such. Software can read the abnormality heart of PACs.

Keywords: heart abnormalities, PAC, detection of heart disease, arrhythmias PAC, Android Software