

ABSTRACT

Heart rate is one of the human vital signs, specifically heart rate can provide information on the rate of pulse, systolic pressure and diastolic pressure that can be used to measure information about body health. Cardiac information can be measured using seismocardiography a non-invasive method by reading micro chest vibrations using an accelerometer sensor. Smartphones that have accelerometer sensors are the common solution for the community so that they can be used to look for seismocardiographic signals to find out heart information.

From this developed system signal readings using a smartphone, amplifier method and outlier detection the reading accuracy results are up to 75% for heart rate, and 90-94% accuracy reading for systolic and diastolic

Keywords: Seismocardiography, Heart Rate, accelerometer, systole,diastole