ABSTRACT

Atrial Fibrillation is a symptom of an abnormal pulse rhythm that occurs in the heart, which is characterized by rapid and ineffective atrial activity and irregular verticular contractions. Atrial Fibrillation is a cardiovascular disease that must be well recognized by the public in order to avoid a stroke, heart failure or heart attack.

In this research the ECG signal processing is inputted to the Raspberry Pi to produce RR interval measurements on the ECG signal and display the status of absence or absence of Atrial Fibrillation from cardiac ECG signals. The threshold value used as a parameter for the presence or absence of atrial fibrillation is a deviation value greater than 14%.

The results of this research is display in a software with an interface designed in python language and display the status of the results of the detection of atrial fibrillation also equipped with heart rate variability parameters. With an accuracy of the tool up to 99.39%, it is tested with 2 signal classifications namely Normal Sinus Rhythm ECG and Atrial Fibrillation Signal

Keywords: Atrial Fibrilation, EKG, Heart Rate Variability, Interval R-R.