**ABSTRACT** 

Bipolar Disorder is one of mental health issues that is common in Indonesia. The sufferers's

mood will be changing drastically from time to time. This mood changes can cause many unwanted

things. To prevent these unwanted things, a real time ECG monitoring system is made for bipolar

disorder sufferers so that the system can warned bipolar disorder sufferer's closest person. In this

research, we discussed a monitoring system using NodeMCU, smartphone and SVM algorithm.

In this system, signal from database will be processed to eliminate unwanted noise. Then

the processed data's R peak will be detected to get the HRV value. After that, all the data will be

putted in training mode for classification model. The result of classification from each data will be

displayed in Blynk application.

**Keywords:** Andorid, IoT, NodeMCU, Non-preemptive, Smartphone