

ABSTRACT

Influenza virus or flu is a very common disease experienced by humans of all ages, generally Influenza sufferers will experience symptoms in their bodies such as fever, cough, sneezing, headache, and a stuffy nose. Influenza virus is usually detected through symptoms of the disease, such as temperature. elevated body or experiencing sneezing.

In this study, we propose a model to accurately detect the symptoms of Influenza, namely detecting the flu through the heart rate (Heart Rate), steps (Steps) and resting heart rate of a person suspected of having influenza symptoms.

In this study the model will be designed using Python language and already has the library needed to process the data obtained, this system will process data from 3 subjects that have been obtained from wearable device users in the form of Heart Rate. Neural Network algorithm then performs data training. The result of testing this model is that the Neural Network algorithm can detect flu with the accuracy values of each subject being 76%, 70%, and 89%, and the conclusion is that the Heart Rate and Resting Heart Rate will increase in value when the subject has the flu even though the Steps do not increase.

Keywords: Heart Rate, Steps, Neural Network, Resting Heart Rate, Timeseries Heart Rate