

## ***ABSTRACT***

*The impact of disasters can be in the form of damage to buildings and loss of life because these disasters are unpredictable, coupled with the fact that Indonesia located between three major plate paths in the world it can be a standar for adjusting the early warning system to earthquakes, especially the secondary impacts that follow. A system using the Internet of Things with multisensors as a seismic wave finder where the data will be processed by the Random Forest algorithm by classifying it into three classes that is normal, vandalism, nondestructive earthquake and destructive earthquake adjusts to adjusts to Peak Ground Acceleration (PGA). Based of the testing an implementation on the algorithm accuracy is maximum result 99,983% in performance of the K-Fold Cross Validation. The system aims to mitigate earthquakes with facilities in the form of electricity cut-off, navigation, alarms and notifications.*

***Key Word:*** *earthquake, secondary impacts, Internet of Things, Peak Ground Acelleration (PGA), Random Forest, multisensor*