

## ***ABSTRACT***

### ***IMPLEMENTATION OF TSUNAMI EARLY WARNING SYSTEM BASED ON IoT USING SATELLITE COMMUNICATION***

Indonesia is a country located in the meeting area of three tectonic plates namely the Indo-Australian Plate, Eurasian Plate and Pacific Plate. Not only that, Indonesia is also located in the area of the world's ring of fire. So that Indonesia is prone to tsunamis and earthquakes. Even though Indonesia is prone to tsunami disasters. Tsunami early warning systems in Indonesia are still inadequate.

So the author makes an IoT-based tsunami early warning system using satellite communication. In this system if the tsunami sensor detects a tsunami, the system will send an alert to the Android smartphone. If there are some residents do not have a smartphone or internet access. Then there is a buzzer as a tsunami notification.

The results of this system testing were obtained from the success of the tsunami early warning system sending data from the tsunami sensor to an Android-based smartphone.

**Keywords:** *Tsunami, IoT, Android, Satellite*