

ABSTRACT

Landslide disasters on the railroad are a very undesirable event for railroad transportation users. In addition, landslides can also cause large losses, both material and immaterial losses.

The above problems can be anticipated by a landslide warning system on the railroad. This system works automatically when landslides occur. In the event of a landslide, the sensor detects whether there is a dangerous landslide on the railway line or not, then it sends the landslide hazard data to the central station and displays it on the station monitor.

In this final project, the author designs and prepares a landslide warning system. This system is active when the akselerometer sensor detects the slope above the specified threshold. Each sensor will communicate with each other using wireless and then microcontroller processes the data and will be sent directly to the nearest station using SMS and displayed on the monitor at the station.

This final project aims to produce a landslide warning system to anticipate disasters on the railway line

Keywords: *Wireless, Akselerometer, SMS, mikrokontroller*