

## **ABSTRACT**

This capstone project was a project of research at Capiz State University – Pilar Satellite College. This study aims to develop a low-cost SMS notification and alarm for an Arduino based land movement detector and monitoring system; send notifications and alarm of land movement for landslide awareness with in the community; and monitor the land movements in the area. This study aims to send alert to the users who are living in remote area, with no access to the internet and in a sloppy mountain for land movement updates near in the area. It also aims to develop an automated alert system that can produce SMS notification and sound that can alert the community for the land movement in the area. To avoid accident because the community is alerted by the system of normal level of land movements in the area. They can evacuate to the safe area before the highest land movement may occur. The testing result was successful as it ensures that the features were real-time alerts, enabling prompt response for potential events.

*Keywords:* SMS notification, alarm, Arduino based, land movement, monitoring system.