

ABSTRACT

A landslide disaster is one of the disasters that has claimed many lives and material losses, especially in Indonesia. Therefore, an early detection tool needs to be created. The cause of landslides is the shifting of the soil, soil moisture that affects soil conditions and vibration with a magnitude unit. To measure these parameters, an Internet of Things (IoT) based system is used which is connected to various sensors. The sensors used include the MPU 6050 for reading slopes and for vibrations and Soil Moisture for soil moisture.

MPU6050 sensor has an average error value of 0.3472% on the X axis and on the Y axis has an error value of 1.069%. MPU6050 sensor to read the greatest vibration the acceleration value is 0.28 and finally the soil moisture sensor YL-69 has an average error value of 18.733%

Keywords : IoT, landslide disaster, MPU6050, Soil Moisture