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Landslide Detection using IoT

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Abstract: The paper aims to decrease the number of accidents that occuron curved roadways. To do this, a warning LCD Display that displays as a vehicle approaches from the other side of the bend serves as a message to the driver. The IR transmitter and receiver sensor, which is connected to the Arduino Uno microcontroller, is used to detect the vehicle. And Motor operated gates are fixed upon each sides for free passage of vehicles from one side to other side. On the winding roads in the ghat portion, this might save thousands of lives. By implementing a new technique, they come up with a plan to prevent accidents after determining their causes and effects. Two IR sensors make up the new method, which alerts the vehicle on the opposite road. Landslide is one of the hazardous and critical geographical process, which damages to civil infrastructure and property as well as causes loss of life. This paper is an attempt with regard to the expansion of a landslide susceptible approach by using Accelerometer Sensor. And Rain Sensor is used for detecting heavy rainfall. Upon detecting the landslide condition or Heavy Rains it warns on display as a message and closes gates on either sides of ghat till road condition gets normal

Keywords: Automated Injury Identification; Object Detection Advancements; Transfer Learning Strategies; YOLO V8 Framework.

