

PROJECT OBJECTIVES

Date	18 August 2022
Team Id	PNT2022TMID16376
Project name	Natural Disaster Intensity Analysis and Classification using Artificial Intelligence
Marks	2 Marks

Natural Disasters take humans by surprise. It disturbs our normal life cycle and gives life threats. It destructs infrastructure such as hospitals, educational institutions and in most cases life too. Every year over 60,000 lives are lost because of climate change. There are more and more natural disaster every year time to detect them has remained minimal people often only have seconds of warning before disaster strikes and in some cases there is not even any warning at all.

With the help of AI, we might be able to predict these disasters farther ahead. We are able to predict the natural disaster through a technique called Machine Learning. Machine learning uses neural network inspired by those in the human brain in order to learn and make decision. It does this by taking large sets of data and buying to find pattern. It uses many neural network layer to make a decision after many attempt it will take right decision.

In this project we developed a multi-layered deep convolutional neural network model that classifies the natural disaster and tells the intensity of disaster of natural. The model uses an integrated webcam to capture the video frame and the video frame is compared with the pre-trained model and the type of disaster is identified and showcased on the OpenCV window.

Main objectives of disaster management:

- To predict the upcoming disaster
- To rehabilitate people to safer places.
- Ensuring adequate amount of survival kits.

The disaster management technique helps people to give warning in prior. It helps people to reduce infrastructural and livelihood damages.