

DATE	16 NOVEMBER 2022
TEAM ID	PNT2022TMID25540
PROJECT NAME	Natural Disasters Intensity Analysis and Classification

PROJECT OBJECTIVES:

- Integrating frontier technologies including Artificial Intelligence (AI) into existing emergency systems can harness the potential of existing data streams and improve hazard mitigation and disaster management.
- AI can also enhance earthquake detection and tsunami warning using geological information from research centers around the world. Building up reliable datasets for such events is crucial, webinar speakers said. Wildfires can also be studied in real time and detected earlier based on multi-sourced data
- With the help of a neural network, it is possible to predict floods and save the masses from the disaster. By implementing a convolutional neural network and Modified Particle Swarm Optimization (MPSO), Padma war et al. developed a deep learning approach to foresee the flood circumstances and identify the individuals beforehand.
- Prevent disasters and achieve substantial reduction of disaster risk and losses in lives, livelihoods, health, and assets (economic, physical, social, cultural and environmental).Floods are a calamitous and remarkable disaster. Floods impact greatly on human lives, economically and financially affecting nations.
- The objectives of this project can be summarized as follows:
- We will be able to learn how to get and prepare the dataset.
- We will be able to know how to do image processing.
- We will understand how CNN layers are work.
- Classify images using a Convolutional Neural Network.

- We will be able to know what are the activation functions can be used.
- We will be able to know how to read images using Open CV.
- We will know convolutional Neural Networks for Computer vision AI Problems.