Date	12 November 2022
Team id	PNT2022TMID54341
Project Name	**Natural Disasters Intensity Analysis and Classification using Artificial Intelligence**
Marks	2 Marks

OBJECTIVES

Artificial intelligence (AI) models have shown remarkable success and superiority to handle huge and nonlinear data owing to their higher accuracy and efficiency, making them perfect tools for disaster monitoring and management.

When using AI to detect extreme events such as avalanches or earthquakes, the availability of data can be a limiting factor. **AI-based methods can be very effective if a training dataset covers very large events**. However, the availability of such data is limited because of the rarity of these events.

The objectives of disaster management are:

- Supply of essential commodities. Rehabilitation of disaster victims.
- Protective measures to reduce the intensity of future disasters.
- Rescue of victims by the event and and disposal of losses sufferred.

Disaster management aims to **reduce, or avoid, the potential losses from hazards, assure prompt and appropriate assistance to victims of disaster, and achieve rapid and effective recovery**. Artificial intelligence (AI), in particular machine learning (ML), is playing an increasingly important role in disaster risk reduction (DRR) – from **the forecasting of extreme events and the development of hazard maps to the detection of events in real time, the provision of situational awareness and decision support.**

We can able to learn few concepts which is related to natural disaster intensity and analysis using AI/ML such as:

- **Know fundamental concepts and techniques of the Artificial Neutral Network and Convolution Neural Network.**
- **Gain a broad understanding of image data.**
- **Work with sequential type of modeling.**

- **Work with Keras capabilities.**
- **Work with image processing techniques.**