Date	19 November 2022
Team ID	PNT2022TMID46034
Project Name	Natural Disasters Intensity Analysis and Classification using Artificial Intelligence

Project Objective

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 disposal of losses suffered.

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.