

PROJECT OBJECTIVES

Date	08 November 2022
Team ID	PNT2022TMID40634
Project Name	Natural Disasters Intensity Analysis and Classification using Artificial Intelligence
Mark	2 Marks

- 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.
- 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.
- This can be achieved by using the Deep Learning and CNN model with the cumulative effect of the Artificial Intelligence technology.
- 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.
- Upon completing all the above mentioned tasks or milestones we can obtain a model which can predict the forest fires at an early stage.