

Project Design Phase-I
Proposed Solution Template

Date	03 October 2022
Team ID	PNT2022TMID21552
Project Name	EMERGING METHODS FOR EARLY DETECTION OF FOREST FIRES
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Forest fires are major to the ecological and economical balance of the earth. They destroy huge amounts of vegetation, animals and is very harmful to the earth. Forest fire can be both man-made and natural and spreads very easily. They can be random and unforeseeable. Therefore it is imperative that forest fires can be detected early so that the concerned authorities are alerted so that they can take the necessary steps needed to control it.
2.	Idea / Solution description	Our solution is to use AI and neural networks such as CNN to develop an accurate model for prediction and use computer vision techniques and image processing and video to perform real time detection and prediction. The usage of satellite data will provide more reliable and vast data on which our prediction model can be built
3.	Novelty / Uniqueness	This project aims to monitor an area of forest and provide real time detection of forest fires and alert the concerned authorities
4.	Social Impact / Customer Satisfaction	This project will have major social impact. <ol style="list-style-type: none">1. It will prevent death of several animals and plants and helps animals from becoming endangered or extinct2. It will help tribal communities living in the forest and other people depend on forest for their livelihood3. It will help reduce the greenhouse gases released into the atmosphere.

		4. It will help increase the biodiversity of the forest.
5.	Business Model (Revenue Model)	The project aims to help the environment and people. But revenue can be generated based on the installation of this system in private forest reserves and parks.
6.	Scalability of the Solution	The solution can be scaled to monitor huge forests and detect forest fires even in sparsely populated region where detection is usually very difficult.