EMERGING METHODS FOR EARLY DETECTION OF FOREST FIRE

Date	16 October 2022
Team ID	PNT2022TMID30863
Project Name	Project - Emerging Methods for Early Detection of Forest Fires
Maximum Marks	2 Marks

PROPOSED SOLUTION :

Technologies, such as drones, robots, and satellites, are all being used to detect, impede, and douse fires. The user interacts with a web camera to read the video. Once the input image from the video frame is sent to the model, if the fire is detected it is showcased on the console, and alerting sound will be generated and an alert message will be sent to the Authorities.

PARAMETERS	DESCRIPTIONS
Problem Statement	A forest fire risk prediction algorithm, based on support vector machines, is presented. The algorithm depends on previous weather conditions in order to predict the fire hazard level of a day.
Idea (feasibility of idea)	Use computer vision methods for recognition and detection of smoke or fire, based on the still images or the video input from the drone cameras
Novelty	Real time computer program detect forest fire in earliest before it spread to larger area.
Social impact	Blocked roads and railway lines, electricity, mobile and land telephone lines cut, destruction of homes and industries.
Business Model	The proposed method was implemented using the Python programming language on a Corei3or greater.

Scalability	Computer vision models enable land cover classification and smoke detection from satellite and ground cameras.