

# EMERGING METHODS FOR EARLY DETECTION OF FOREST FIRES

## ABSTRACT

Forest fires are a major issue and have been affecting the wildlife and living organisms and also being the cause for major carbon emission. To tackle this problem numerous solutions have been developed with the help of many devices. The solution is simple detect the fire before it starts and alert the officials if it is already under fire we predict where else the fire will move on. We use sensors and cameras, Cameras used in highly dense forest areas since satellite can't get a good aerial view of the surroundings. Satellites play an important role in forest fire detection. The real time detection is done through satellite and cameras, We also use sensors to detect increase in temperature and sensors that can detect increase in carbon emissions. We classify images as two sets forests on fire and forests that are not on fire. We then use ML, to train the model that is capable of distinguishing between forests that are on fire and forests that are not. We then set limit for the computer to detect fire if the limit for the fire is reached a fire alert is issued and the concerned authorities are notified and the location under observation is also sent as coordinates to the concerned. The entire project is developed easily with this implementation method. We can save lot of living organisms and prevent forest fire across the world all it needs is few automation with Intelligence that can make autonomous decisions. We can save lots of preserved trees and the whole environment.

Team Members (Team no-15):

Sanjay GJ

Sudhir kumaar SJ

Nandhakumar G

Sandeep Kumar Varma M