

Emerging Methods For Early Detection Of Forest Fires

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Problem Statement

Forest fires are a major environmental issue, creating economic and ecological damage while endangering human lives. It is difficult to predict and detect Forest Fire in a sparsely populated forest area and it is more difficult if the prediction is done using ground-based methods like Camera or Video-Based approach. Satellites can be an important source of data prior to and also during the Fire due to its reliability and efficiency.

PROBLEM

How might we enhance the instant detection of forest fires?



Key rules of brainstorming

To run an smooth and productive session



Stay in topic.



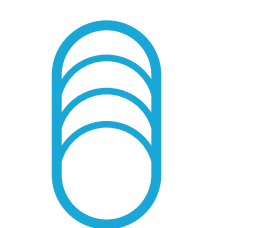
Encourage wild ideas.



Defer judgment.



Listen to others.



Go for volume.



If possible, be visual.

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Brainstorm

The following are the ideas suggested by the team during the brainstorming phase.

Charann K S

Based on Gaussian mixture model

Image processing

Emerging methods like LoRaWAN Sensor Networks

Fire Detection Using CNN Model

Harish J

Detection using wireless sensor network

Using Optical sensor and Digital camera

Using microwave sensor

Using Cluster Heads to determine the GPS

Anto Godwin N

Prediction using machine learning

Using radio Acoustic Sounding system

Utilizing Neural network

Early detection using unmanned Aerial Vehicle

Durai Murugan P

Deep Learning can be used

Collecting Data Using Satellite Image

Implementing Ground Level Sensor for data

Monitoring the forest Using satellites