

EMERGING METHODS FOR EARLY DETECTION OF FOREST FIRES

Over the last few decades Forest fires are increased due to deforestation and global warming. Many trees and Animals in the Forest are affected by Forest Fires. Technology can be efficiently utilized to solve this problem.

In this research word Forest Fire detection is inevitable for Forest Fire management. The purpose of this word is to propose Artificial Intelligence techniques to predict Forest Fires which would be cost effective.

The Artificial Intelligence leading to the fifth industrial revolution, which focuses more on solving climate goals in line with the revolution. New requirements in the ecological environment arise due to the expeditious development of society.

Among the various natural disasters, Fire hazard seems to own the characteristics of spreading and also it becomes very challenging to control, and thus, it results in heavy destruction that might be irrevocable.

Over the past few years, there is a tremendous increase in the count, occurrence, and severity of Wildfires across the world that has created a great impact on the ecosystem of the country.

Techniques:

The mixed learning techniques is composed of Agile Methodologies and Data science tools.

Agile Methodology:

Agile methodology is a way to manage a project by breaking it up into several phases. It involves constant collaboration with stake holders and continuous improvements at every stage.

Data Science Tools:

Data science tool is for analysing data, creating aesthetic and interactive visualizations and creating power full predictive models using machine learning algorithms.

The proposed model is trained on both Dense and Rain Forests in detecting and predicting the chances of Fires. The proposed model out performs the traditional methods such as Bayesian classifiers, Random Forest and Support vector machines.

Forest Fire Prevention:

- Drown all Fires.
- Keep all flammable objects away from fire.
- Carefully dispose of hot charcoal.

Effects:

- Wild fires lead's to erosion.
- Wild fires shape ecosystems.