LITERATURE SURVEY

Emerging Methods For Early Detection Of Forest Fires

Author name: Georgi Hristov, Jordan Raychev

Year Of Publishing: 2018

Description:

Forest fires are occurring throughout the year with an increasing intensity in the summer and autumn periods. Theseevents are mainly caused by the actions of humans, but different nature and environmental phenomena, like lightning strikes or spontaneous combustion of dried leafs or sawdust,can also be credited for their occurrence. Regardless of the reasons for the ignition of the forest fires, they usually cause devastating damage to both nature and humans. Forest fires are also considered as a main contributor to the air pollution, due to the fact that during every fire huge amounts of gases and particle mater are released in the atmosphere.

Author name: Ahmad A.A.Alkhatib

Year Of Publishing: 2014

Description:

In this study he had been discovers Forests are the protectors of earth's ecological balance. Unfortunately, the forest fire is usually only observed when it has already spread over a large area, making its control and stoppage arduous andeven impossible at times. The result is devastating loss and irreparable damage to the environment and atmosphere (30% of carbon dioxide (CO2) in the atmosphere comes from forest fires), in addition to irreparable damage to the ecology.

Author name: s.Thapa

Year of publishing: 2021

Description:

Forest fire not only causes ecological, economic, and material damages but also destroys the forests which are an irreplaceable sink of carbon. In order to support foresters, government authorities, and firefighters in developing efficient fire-risk management plans and to properly monitor and identifythe risk areas, it is also crucial to understand the relationship between climate and fire regimes. Forest-fire risk mapping is anessential component in fire management and depends on various factors like temperature, topography, vegetation type, land cover, and distance from settlements androads.

Author name: Mubarak

Year of publishing: 2018

Description:

Forest fire detection systems are gaining a lot of attention because of the continual threat from fire to both economic properties and public safety. Hundreds of millions of hectares are destroyed by wildfires each year and over 200,000 forest fires happen every year in the world. Forest fires destroy a total area of 3.5 to 4.5 million km2. Increase in forest fires in forest areas around the world has resulted in an increased motivation for developing fire warning systems for the early detection of wildfires. Sensor technology has

been widely used in fire detection, usually depending on sensing physical parameters such as changes in pressure, humidity, and temperature, as well as chemical parameters such as carbon dioxide, carbon monoxide, and nitrogen dioxide.

Author name: U Dampage

Year Of Publishing: 2022

Description:

Forest fires have become a major threat around the world, causing many negative impacts on human habitats and forestecosystems. Climatic changes and the greenhouse effect are some of the consequences of such destruction. Interestingly, ahigher percentage of forest fires occur due to human activities. Therefore, to minimize the destruction caused by forest fires, there is a need to detect forest fires at their initial stage. This paper proposes a system and methodology that can be used todetect forest fires at the initial stage using a wireless sensor network. Furthermore, to acquire more accurate fire detection, a machine learning regression model is proposed.

Author: T Wati

Year Of Publishing: 2017

Description:

Forest fires in Indonesia are serious problem affecting widely in material losses, health and environment. Himawari-8 as oneof meteorological satellites with high resolution 0,5 km x 0,5 km can be used for forest fire monitoring and detection. Combination between 3, 4 and 6 channels using sataid software with

visualize forest fire in the study site. Monitoring which used Himawari-8 data on August, September and October 2015 can detect the distribution of smoke and the extents of forest fire inSumatera and Kalimantan.