

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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MINI PROJECT REPORT

OF

FOREST FIRE ALERT SYSTEM

Submitted by

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Under the Guidance

of

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CERTIFICATE

*Certified that the mini project work entitled "**FOREST FIRE ALERT SYSTEM**" is a bonafide work carried out by*

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in partial fulfilment for the award of **BACHELOR OF ENGINEERING** in **INFORMATION SCIENCE AND ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM** during the year 2022-2023 It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

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Mr. PRADEEP NAYAK

Project Guide

A handwritten signature in black ink, appearing to be "Sudheer", written over a horizontal line.

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ABSTRACT

The Forest Alert Monitoring System is an advanced technological solution designed to address the pressing issue of forest conservation and management. This system utilizes modern technologies, including remote sensing, satellite imagery, and artificial intelligence, to provide real-time monitoring and analysis of forests, enabling timely responses to potential threats and improving overall forest protection.

One of the primary advantages of the Forest Alert Monitoring System is its ability to cover vast and remote forested areas that are challenging to monitor through traditional means. The integration of remote sensing and satellite imagery ensures that even the most inaccessible regions can be observed, allowing for a comprehensive assessment of forest health and potential threats.

The mobile application and web platform play a crucial role in fostering collaboration among different stakeholders. Forest rangers and conservationists can quickly access real-time alerts and data, allowing them to respond promptly to emerging threats. Additionally, the platform facilitates data sharing among various organizations, government agencies, and research institutions, enabling a holistic and coordinated approach to forest management and conservation.

Incorporating GIS technology into the system empowers users to visualize data spatially, enabling them to understand the geographical distribution of forest-related issues. Decision-makers can use this information to prioritize conservation efforts, allocate resources efficiently, and implement targeted interventions in areas facing the highest risks.