

**A Course Based Project Report on
Predicting Future Forest Fire Risk Using
Historical Satellite Data**

Submitted to the
Department of CSE-(CyS, DS) and AI&DS

in partial fulfilment of the requirements for the completion of course
Models for Data Science LABORATORY(22PC2DS301)

BACHELOR OF TECHNOLOGY

IN

CSE-Data Science

Submitted by

P.SHASHANK
P.SREEJA REDDY
P.ABHISHEK
P.NIRANJAN

23071A6745
23071A6746
23071A6747
23071A6748

Under the guidance of

Mrs.N.Madhuri

Assistant Professor



Department of CSE-(CyS, DS) and AI&DS

**VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI
INSTITUTE OF ENGINEERING & TECHNOLOGY**

An Autonomous Institute, NAAC Accredited with 'A++' Grade, NBA
VignanaJyothi Nagar, Pragathi Nagar, Nizampet (S.O), Hyderabad – 500 090, TS, India

November - 2025

VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

An Autonomous, ISO 21001:2018 & QS I-Gauge Diamond Rated Institute. Accredited by NAAC with 'A++' Grade
NBA Accreditation for B.Tech. CE,EEE,ME,ECE,CSE,EIE,IT,AME, M.Tech. STRE, PE, AMS, SWE Programmes
Approved by AICTE, New Delhi, Affiliated to JNTUH, NIRF (2024) Rank band:151-200 in Engineering Category
College with Potential for Excellence by UGC, JNTUH-Recognized Research Centres:CE,EEE,ME,ECE,CSE Vignana Jyothi
Nagar, Pragathi Nagar, Nizampet (S.O.), Hyderabad – 500 090, TS, India.
Telephone No: 040-2304 2758/59/60, Fax: 040-23042761
E-mail: postbox@vnrvjet.ac.in, Website: www.vnrvjet.ac.in

Department of CSE-(CyS, DS) and AI&DS



CERTIFICATE

This is to certify that the project report entitled “**Predicting Future Forest Fire Risk Using Historical Satellite Data**” is a bonafide work done under our supervision and is being submitted by **Mr. Shashank (23071A6745)**, **Miss. Sreeja Reddy (23071A6746)**, **Mr. Abhishek (23071A6747)**, **Mr. Niranjana (23071A6748)** in partial fulfillment for the award of the degree of **Bachelor of Technology in CSE-Data Science**, of the VNRVJIET, Hyderabad during the academic year 2025-2026.


Mrs. N. Madhuri

Assistant Professor

Dept of CSE-(CyS, DS) and AI&DS


Dr. T. Sunil Kumar

Professor & HOD

Dept of CSE-(CyS, DS) and AI&DS

Course based Project Reviewer

**VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI
INSTITUTE OF ENGINEERING AND TECHNOLOGY**

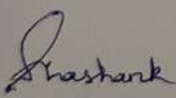
An Autonomous Institute, NAAC Accredited with 'A++' Grade,
VignanaJyothi Nagar, Pragathi Nagar, Nizampet(SO), Hyderabad-500090, TS, India

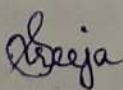
Department of CSE-(CyS, DS) and AI&DS

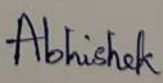



DECLARATION

We declare that the course based project work entitled “**Predicting Future Forest Fire Risk Using Historical Satellite Data**” submitted in the Department of **CSE-(CyS, DS) and AI&DS**, Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology, Hyderabad, in partial fulfillment of the requirement for the award of the degree of **Bachelor of Technology in CSE-Data Science** is a bonafide record of our own work carried out under the supervision of **Mrs.N.Madhuri, Assistant Professor, Department of CSE-(CyS, DS) and AI&DS, VNRVJIET**. Also, we declare that the matter embodied in this thesis has not been submitted by us in full or in any part thereof for the award of any degree/diploma of any other institution or university previously.
Place: Hyderabad.


P . Shashank
(23071A6745)


P . Sreeja Reddy
(23071A6746)


P . Abhishek
(23071A6747)


P . Niranjana
(23071A6748)

ACKNOWLEDGEMENT

We express our deep sense of gratitude to our beloved President, **Sri. D. Suresh Babu**, VNR Vignana Jyothi Institute of Engineering & Technology for the valuable guidance and for permitting us to carry out this project.

With immense pleasure, we record our deep sense of gratitude to our beloved Principal, **Dr. C.D Naidu**, for permitting us to carry out this project.

We express our deep sense of gratitude to our beloved Professor **Dr. T. Sunil Kumar**, Professor and Head, Department of CSE-(CyS, DS) and AI&DS, VNR Vignana Jyothi Institute of Engineering & Technology, Hyderabad-500090 for the valuable guidance and suggestions, keen interest and through encouragement extended throughout the period of project work.

We take immense pleasure to express our deep sense of gratitude to our beloved Guide, **Mrs.N.Madhuri**, Assistant Professor in CSE-(CyS, DS) and AI&DS, VNR Vignana Jyothi Institute of Engineering & Technology, Hyderabad, for her valuable suggestions and rare insights, for constant source of encouragement and inspiration throughout my project work.

We express our thanks to all those who contributed for the successful completion of our project work.

Mr. P.Shashank	(23071A6745)
Miss. P.Sreeja Reddy	(23071A6746)
Mr. P.Abhishek	(23071A6747)
Mr. P.Niranjan	(23071A6748)