**A**

**Project Report**

**On**

**Project Title Name**

**Submitted in partial fulfillment of the requirements**

**For the award of the degree of**

**Bachelor of Technology**

**In**

**Computer Science and Engineering**

**By**

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**Under the Supervision of**

**Prof. or Dr. Name**



**Department of Computer Science and Engineering**

**Affiliated to**



**Dr. A.P.J. Abdul Kalam Technical University**

**Lucknow, Uttar Pradesh,**

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**April, 2024**

# CERTIFICATE

This is to certify that the project report entitled “**TITLE OF PROJECT WORK**” submitted by Mr./Ms. <**NAME> <Roll No:> OF STUDENT 1 Roll No.,** Mr./Ms. <**NAME> <Roll No:> OF STUDENT 2,** Mr./Ms. <**NAME> <Roll No:> OF STUDENT 3** to the IILMCET, Greater Noida, Utter Pradesh, affiliated to Dr. A.P.J. Abdul Kalam Technical University Lucknow, Uttar Pradesh in partial fulfillment for the award of Degree of Bachelor of Technology in Computer Science & Engineering is a bonafide record of the project work carried out by them under my supervision during the year 2021-2022.

|  |  |
| --- | --- |
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# ABSTRACT [Example]

We have proposed an approach for building extraction from very high resolution (VHR) multispectral images using NDVI (Normalized Difference Vegetation Index) based segmentation and morphological operations. This approach uses both spatial and spectral properties of an image scene for building detection. Spectral properties are related to NDVI based segmentation and spatial properties are related to the morphological operations. Normally an image scene is consists of natural region (vegetation and soil) and manmade regions (buildings and roads). Use of NDVI (spectral properties) eliminates the chance of shadow being a building region and other similar regions that are not road like soil, vegetation etc. because shadow is a spatial property and NDVI is based on spectral property irrespective of brightness in the image. By using NDVI we can eliminate the natural regions from the man made.

**KEYWORDS:** *Extraction, NDVI, Segmentation, Morphology, Image processing, Spatial domain*

NOTE:

1. Not more than 300 words

2. Keywords (6 to 8)

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**NOMENCLATURE**

**English Symbols**

A Pre-exponential constant

*A* Droplet cross-sectional area, m2

*d*

*A* Droplet surface area, m2

*s*

*A*0 Nozzle cross sectional area. m2

Cp Specific heat,J/kg-K

*Cam*

Virtual mass coefficient

c Reaction progress variable

*cd* Coefficient of discharge of nozzle

*c p* ,*d*

Droplet specific heat

*Dd* Instantaneous droplet diameter, m

*Dm* Vapour diffusivity

**ABBREVIATIONS**

ATDC After Top Dead Center

BDC Bottom Dead Center

BTDC Before Top Dead Center

CA Crank Angle

CAD Computer Aided Design

CCS Combined Charging System

CFD Computational Fluid Dynamics

CO Carbon Monoxide

CTC Characteristic–Time Combustion

DI Direct Injection

DME Dimethyl Ether

DNS Direct Numerical Simulations

EGR Exhaust Gas Re- Circulation

FIE Fuel Injection Equipments

HC Hydrocarbon

HWA Hot Wire Anemometer

IC Internal Combustion