A

Project Report

On

MACHINE LEARNING BASED SATELLITE IMAGE ANALYSIS

Submitted As The Partial Fulfillment Of Degree Of

Master's Of Science In GEOINFORMATICS

Submitted By

Kiran T Bhamblani

Id No: 18GI03

Exam No: 03

Under The Guidance Of

Mr. Krunal Suthar

ISTAR

Estd. 1999

Institute of Science & Technology for Advanced Studies & Research

Affiliated to Sardar Patel University

Recognized under Section 2(f) and 12(B) of the UGC Act. 1956

MACHINE LEARNING BASED SATELLITE IMAGE ANALYSIS

By:

KIRAN T. BHAMBLANI

Submitted in partial fulfillment of requirements for the degree of:

MASTERS OF SCIENCE IN GEOINFORMATICS

For the dissertation of project work done during the period of December 2019 to April 2020

Under the Supervision of:

Mr. Kamal Pandey, Scientist/Engineer (SE), GIT/DL, IIRS-ISRO

Mr. Krunal Suthar, Faculty of MSc. Geoinformatics, ISTAR, SPU

INDIAN INSTITUTE OF REMOTE SENSING
Indian Space Research Organisation
Department of Space, Govt. of India

सत्यमेव जयते

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DECLARATION

I Kiran T. Bhamblani, hereby declare that the thesis entitled "**MACHINE LEARNING BASED SATELLITE IMAGE ANALYSIS**" is being submitted in the partial fulfillment of the dissertation work done for the award of **Masters of Science in Geoinformatics**.

The research work has been conducted under the guidance of Mr. Kamal Pandey (Scientist/Engineer SE), at Central Computing Facility (CCF) Lab, Geographic Information Technology and Distance Learning (GIT/DL) department of Indian Institute of Remote Sensing (IIRS-ISRO), Dehradun.

The project is completed sincerely under the supervision of Mr. Krunal Suthar, faculty of M.SC. Geoinformatics, Institute of Science and Technology for Advanced Studies and Research (ISTAR), affiliated to Sardar Patel University (SPU), Vallabh Vidya Nagar.

Signature

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CERTIFICATE

This is to certify that the project titled **'Machine Learning based Satellite Image Analysis'** is done by **Ms. Kiran T. Bhamblani,** student of Master's of Science in Geoinformatics from Institute of Science & Technology for Advanced Studies & Research (ISTAR) Vallabh, Vidyanagar. She has carried out this project work at under the supervision of the undersigned at **Indian Institute of Remote Sensing, Dehradun** from **December 12, 2019 to April 30, 2020** (March 21- April 30, 2020 via Work at Home) as a part of her final semester project work.

During the project work, I found her sincere and hard working. She understood the problem and implemented it independently. I wish her success in her future endeavors.

(Project Guide)

Date: April 30, 2020

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This is to certify that Mr. / Miss **KIRAN TIRTH BHAMBLANI** Exam Number **3**, student of M.Sc. Geoinformatics, Institute of Science & Technology for Advanced Studies & Research, Vallabh Vidyanagar, Gujarat has carried out his/her 4th semester project work - (PS04CGIN21) in M.Sc. Geoinformatics from 12th December 2019 to 30th April 2020 as a partial fulfillment of Master of Science in Geoinformatics affiliated to Sardar Patel University.

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"**Always be a work in progress.**" Emily Lillian