# **Declaration by the Candidate**

I declare that thesis entitled "Develop an Automatic Road Network Extraction System from Remote Sensing Images" is my own work conducted under the supervision of Dr. Ashish M. Kothari at Department of Electronics and Communication, Faculty Engineering and Technology, Atmiya University, Rajkot, Gujarat, India and approved by the Director of Research.

I further declare that to the best of my knowledge the thesis does not contain any part of any work which has been submitted for award of any degree either in this University or any other University without proper citation.

Date: 1911/2023

Place: Rajkot

Patel Miralben Jerambhai

Certificate of Supervisor

This is to certify that work entitled "Develop an Automatic Road Network Extraction

System from Remote Sensing Images" is a piece of research work done by Miral

Jerambhai Patel under my supervision for the degree of Doctor of Philosophy in

Department of Electronics and Communication, Faculty of Engineering and Technology,

Atmiya University, Rajkot, Gujarat, India

To the best of my knowledge and belief the research work and thesis

Embodies the work of candidate himself / herself, I.

Has duly been completed, II.

Fulfils the requirement of ordinance related to Ph.D. degree of the University & Ш.

is up to the standard both in respect of content and language for being referred to IV.

the examiner.

Date: 191112023

Place: Rajkot

Dr. Ashish M Kothari

## Thesis Approval Form

The Viva-Voce of the Ph.D. thesis entitled "Develop an Automatic Road Network Extraction System from Remote Sensing Images" submitted by Patel Miralben Jerambhai (Enrolment No. 190156004) was conducted on 11/01/2023 (Wednesday) at Atmiya Based on the Performance of the Candidate, We, the panel of examiners, recommend that Please tick any of the following)

2. He / She be awarded Ph.D. Degree with minor modification  Please Suggest Modification			

3. The following modifications are to be incorporated in the thesis within one month and viva-voce be re-conducted by the same panel of examiners

Please Suggest Modification

4. He / She should not be awarded Ph.D. Degree

Please mention Reason for Rejection

Date: 11/01/2023

Place: Rajkot

Signature	delhis.	A Committee	- That
	Research Supervisor	University Nominee	External Examiner
	Research Supervisor		

Yogidham Gurukul, Kalawad Road, Rajkot - 360005, Gujarat (INDIA)

#### Certificate

# **Pre Thesis Submission Presentation**

This is to certify that Patel Miralben Jerambhai has made Pre Ph.D. presentation on the research work entitled Develop an Automatic Road Network Extraction System from Remote Sensing Images in the Faculty of Engineering & Technology, Atmiya University, Rajkot on 02/12/2022 before Departmental Research Committee for getting feedback and comments.

This is also to certify that all the suggestions and comments given by the Doctoral Progress Review Committee are incorporated. Moreover the presented research work was appreciated and recommended by all attendees.

Date: 02/12/2022

Place: Rajkot

Research Coordinator



#### Declaration by Research Scholar Submission of Thesis

I declare that the submitted thesis entitled "Develop an Automatic Road Network Extraction System from Remote Sensing Images" incorporates

- All the suggestions / directions / modifications / additions / deletions received from the supervisor and the external examiners through their thesis evaluation reports.
- All the suggestions / directions / modifications / additions / deletions received from the panel of examiners during the public viva-voce (Open Defence) conducted on 11 / 01 / 2023

Date: 1911/2023 Place: Rajkot

Patel Miralben Jerambhai

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Patel Miralben Jerambhai