Thesis Title

M.Tech Dissertation

by

Your Name
(Reg. No. 22MXXXXX)

DEPARTMENT OF ELECTRICAL ENGINEERING
NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR
HAMIRPUR(H.P.)-177005, India

MAY, 2024

Thesis Title of the Mtech Degree

a Dissertation
Submitted in partial fulfillment of the requirements
for the award of the degree of

Master of Technology
in
Electrical Engineering
(Specialization)

submitted by

Your Name
(Reg. No. 22MXXXXX)

Under the guidance of
Dr. Supervisor Name

to the

DEPARTMENT OF ELECTRICAL ENGINEERING
NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR
HAMIRPUR (H.P.)-177005, India

MAY, 2024

Department of Electrical Engineering
National Institute of Technology Hamirpur
Hamirpur, Himachal Pradesh - 177005, India

CERTIFICATE

I, **Your Name**, hereby declare that the work presented in this dissertation entitled **"Thesis Title"** in partial fulfilment of the requirements for the award of the Degree of **Master of Technology** in **Electrical Engineering** with specialization in **Specialization** and submitted in the **Department of Electrical Engineering** of the **National Institute of Technology Hamirpur** is an authentic record of my own work carried out during a period from **June 2023** to **May 2024** under the supervision of **Dr. Supervisor, Designation, Electrical Engineering Department**. The work presented in this dissertation has not been submitted by me for the award of any other degree of this or any other Institute/University.

Your Name
(Reg. No. Roll No.)

This is to certify that the above statement made by the candidate is true to the best of my knowledge and belief.

Dr. Professor Name
Designation
Electrical Engineering Department

Place: Hamirpur
Date:

The M.Tech Viva-Voce Examination of your name, Research Scholar, has been held on .....

Signature of Supervisor
Date:

Signature of External Examiner
Date: .

विद्युत अभियांत्रिकी विभाग
राष्ट्रीय प्रौद्योगिकी संस्थान हमीरपुर
हमीरपुर, हिमाचल प्रदेश - १७७००५, भारत

प्रमाणपत्र

मैं, **नाम**, एतद्द्वारा घोषणा करता हूं कि **"थीसिस का शीर्षक"** शीर्षक वाली डिसर्टेशन में प्रस्तुत किया गया कार्य, **मास्टर ऑफ टेक्नोलॉजी** की डिग्री के अंतर्गत, **विद्युत अभियांत्रिकी** में **विशेषज्ञता का नाम** विशेषज्ञता के साथ उपाधि के लिए आवश्यकताओं की आंशिक पूर्ति में विद्युत अभियांत्रिकी विभाग, राष्ट्रीय प्रौद्योगिकी संस्थान हमीरपुर में प्रस्तुत किये गए मेरे अपने काम का एक प्रामाणिक रिकॉर्ड है जो कि **डॉ प्रोफेसर का नाम, उपाधी, विद्युत अभियांत्रिकी विभाग**, की देखरेख में **जून २०२३ से मई २०२४** की अवधि के दौरान किया गया है. इस शोध प्रबंध में प्रस्तुत कार्य मेरे द्वारा इस या किसी अन्य संस्थान/विश्वविद्यालय की किसी अन्य उपाधि के लिए प्रस्तुत नहीं किया गया है।

नाम
(पंजीकरण संख्या 22MEEXXX)

यह प्रमाणित किया जाता है कि उम्मीदवार द्वारा दिया गया उपरोक्त कथन मेरे सर्वोत्तम ज्ञान और विश्वास के अनुसार सत्य है।

डॉ. प्रोफेसर का नाम
उपाधी
विद्युत अभियांत्रिकी विभाग

स्थान:हमीरपुर
तारीख:

रिसर्च स्कॉलर, नाम की एम.टेक मौखिक परीक्षा, दिनांक.....को आओजित की गई है।

पर्यवेक्षक के हस्ताक्षर
तारीख:

बाहरी परीक्षक के हस्ताक्षर
तारीख: .

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Inscribing these words of gratitude feels akin to painting a masterpiece on the canvas of appreciation. This incredible path of learning and exploration would not have been possible without the unflinching support and encouragement of the great individuals who have paved the road for my accomplishment.

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Your Name

Abstract

सार

इस पृष्ठ पर अपना अवधारणा हिंदी में लिखना है।

Contents

List of Figures

List of Tables

List of Abbreviations

AC	Alternating Current
DC	Direct Current
EMF	Electromotive Force
HV	High Voltage
GAS	Global Asymptotic Stability
DG	Distributed Generation
MPC	Model Predictive Control

Chapter 1

Introduction

1.1 Section Heading

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1.1.1 Subsection Heading

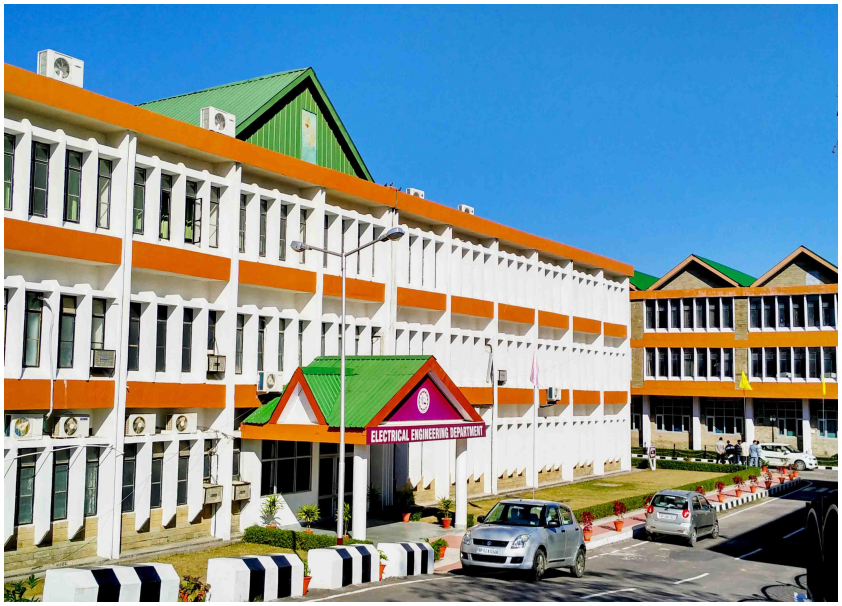

Figure 1.1: Department of Electrical Engineering

1. Line 1
2. Line 2
3. Line 3

1.2 Problem Statement & Objectives

1.2.1 Problem Statement

1.2.2 Objectives

In order to achieve this aim the following objectives have been laid,

(i) Objective 1

(ii) Objective 2

(iii) Objective 3

(iv) Objective 4

1.3 Structure of the Dissertation

The work carried out in this dissertation has been organized into five chapters and an overview of these chapters is given below,

Chapter 1: Introduction gives a brief summary of chapter.

Chapter 2: Literature Review centres on a comprehensive review of the literature related to the topic.

Chapter 3: Methodology adopted describes the methodology used to solve the problem.

Chapter 4: Results & Discussions chapter concentrates on the findings and simultion results.

Chapter 5: Conclusions & Future Scopes presents a comprehensive summary of the results obtained, along with suggestions for advancing this work.

Chapter 2

Literature Review

2.1 Section

2.1.1 Subsec

2.2 Table

Table 2.1: Table

Methods	Limitations
Method 1	• More time-consuming than other methods. • Results suffer from subjective judgments of the inspector.
Method 2	• Sensitive to the shape and size of the structure. • Needs highly careful attention during the test. • Limited to testing distance and the number of surfaces.
Method 3	• Impossible to test on structures that are out of the scanner's line of sight. • Implementation cost is high. • Sensitive to the environment for setting up of equipment.
Method 4	• Requires certain safety parameters due to hazardous ionising radiation. • Two-sided access to the structure is needed. • Relatively expensive testing equipment.
Method 5	• Sensitive to environment noises and illuminated conditions.

Chapter 3

Methodology Adopted

3.1 Equation

$$(a+b)^2 = (a)^2 + (b)^2 \tag{3.1.1}$$

where, a, and b are the variables.

Chapter 4

Results and Discussion

Chapter 5

Conclusions and Future Scope

5.1 Conclusions

5.2 Future Scope

(i) More detailed high-resolution thermal images can be implemented for better enhancement of important features.

(ii) Other updated deep-learning algorithms can be implemented for better flaws identification.

(iii) For improvement of the performance of the fusion algorithm with optimization techniques, other optimizers can be utilized.

List of Publications

International Conferences:

[1]

[2]

Preprints:

[1]

International Journals: (Submitted)

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