DIABETIC RETINAL IMAGE CLASSIFICATION USING DEEP LEARNING

A Dissertation submitted to

ANNAMALAI UNIVERSITY, ANNAMALAI NAGAR

in partial fulfilment of the requirements for the

M.Sc., DEGREE COURSE in COMPUTER SCIENCE

Submitted by

R.ABINISHA (Reg. No.40122412003)

Guided by

Mr. K.SUNDARAMOORTHI., M.Sc., M.Phil.,

Assistant Professor

Department of Computer Science



DHARMAPURAM GNANAMBIGAI GOVT. ARTS COLLEGE FOR WOMEN

MAYILADUTHURAI-609 001
DEPARTMENT OF COMPUTER SCIENCE
MARCH 2024

CERTIFICATE

CERTIFICATE

This is to certify that the project work is done under the guidance of Mr. K.SUNDARAMOORTHI., M.Sc., M.Phil., Assistant Professor., Department of Computer Science., Dharmapuram Gnanambigai Govt. Arts College for Women, Mayiladuthurai and the dissertation entitled "DIABETIC RETINAL IMAGE CLASSIFICATION USING DEEP LEARNING" is submitted by R.ABINISHA(Reg. No. 40122412003) in partial fulfilment of the requirements for the Master of Science for the academic year 2023-2024 is the original work of the candidate.

Signature of the Guide

Signature of the HOD

VIVA VOCE EXAMINATION

The viva	voce Examin	ation of thi	s project v	vork is hel	d on
//2024.					

INTERNAL EXAMINER

EXTERNAL EXAMINER

DECLARATION

DECLARATION

I R.ABINISHA (Reg. No: 40122412003) hereby declare that the project

work entitled "DIABETIC RETINAL IMAGE CLASSIFICATION

USING DEEP LEARNING" Submitted to Annamalai University for the

award of the degree of M.Sc., in Computer Science is a record of bonafide

project work done by me under the guidance of Mr. K.SUNDARAMOORTHI

M.Sc., M.Phil., Assistant Professor, Department of Computer Science,

Dharmapuram Gnanambigai Govt. Arts College for Women, Mayiladuthurai.

Place: Mayiladuthurai

(R.ABINISHA)

Date:

ACKNOWLEDGEMENT

ACKNOWLEDGEMENT

I would to like to express my sincere thanks to our principal **Dr. B. PADMINI.**, **M.A.**, **M.Phil.**, **M.A**(**Ling**).,**Diploma in Folklore**., for permitting me to do the project work.

I devote my sincere thanks to **Dr. K. MANGAYARKKARASI, M.Sc., P.G.D.C.A., M.Phil., Ph.D.,** Head of the Department of Computer Science, Dharmapuram Gnanambigai Govt. Arts College for Women, for her encouragement and support.

I am grateful to express my profound and sincere thanks to my guide **Mr. K.SUNDARAMOORTHI., M.Sc.,M.Phil.,**Assistant Professor., Department of Computer Science., Dharmapuram Gnanambigai Govt. Arts College for Women, Mayiladuthurai, for him valuable guidance and criticisms. The successful completion of the project was due to him timely Monitoring and useful guidance.

My sincere thanks and gratitude to all other Staff members of Computer Science, My parents and my friends for their Co-Operation in completing the foremost task.

CONTENT

CONTENT

S.NO	TITLE	PAGE NO
	ABSTRACT	(i)
1	PROBLEM DESCRIPTION	1
	1.1 INTRODUCTION	
2	SYSTEM STUDY	4
	2.1 EXISTING SYSTEM	
	2.2 PROPOSED SYSTEM	
3	SYSTEM CONFIGURATION	7
	3.1 HARDWARE CONFIGURATION	
	3.2 SOFTWARE CONFIGURATION	
4	SOFTWARE DESCRIPTION	8
	4.1 PYTHON	
	4.2 SUPPORTED PLATFORMS	
5	SYSTEM DESIGN	21
6	SOURCE CODE	22
7	SYSTEM TESTING	34
8	SYSTEM IMPLEMENTATION	38
9	SCREEN LAYOUT	40
10	CONCLUSION	44
11	BIBLIOGRAPHY	45