#### **BONAFIDE CERTIFICATE**

Certified that this Report titled "REDUCTION OF TIMING JITTER IMPACTS IN 8-PSK SYSTEM USING OVERSAMPLING" is the bonafide work of NITHYA M (963320403010) who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Signature of the HOD with Date

Dr.S.MOHANALAKSHMI M.E.,Ph.D, Professor and Head Department of Electronics And Communication Engineering Rohini College of Engineering and Technology Palkulam,Variyoor-629401 Kanyakumari District,Tamilnadu.

Signature of Supervisor with date

Dr.REJI .,M.E.,Ph.D., Associate Professor Department of Electronics And Communication Engineering Rohini College of Engineering and Technology Palkulam,Variyoor-629401 KanyakumariDistrict,Tamilnadu.

# **BONAFIDE CERTIFICATE**

Certified that this Report titled "ADAPTIVE ACE ALGORITHM FOR THE EFFECTIVE REDUCTION OF PAPR IN OFDM SYSTEM" is the bonafide work of G.MARIA KISHOBA (963320403007) who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Signature of the HOD with Date

Dr.S.MOHANALAKSHMI, M.E., Ph.D Professor and Head Department of Electronics and Communication Engineering Rohini College of Engineering and Technology Palkulam, Variyoor-629401 Kanyakumari District, Tamilnadu. A star

Signature of the Supervisor with Date Dr.R.B.BENISHA, M.E., Ph.D Associate Professor Department of Electronics and Communication Engineering Rohini College of Engineering and Technology Palkulam, Variyoor-629401 Kanyakumari District, Tamilnadu

Submitted for the Phase-2 viva-voce examination held on .06..09.-2022.... at Rohini College of Engineering & Technology.

MINER INTER

RNAL EXAMINER

# **BONAFIDE CERTIFICATE**

Certified that this Report titled "FAULT TOLERANT SRAM MEMORY USING 2-D SYMBOLIC HAMMING MATRIX CODE" is the bonafide work of DIVYA C (963320403005) who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

S. M. Lexedelest for 5/22 <sup>2</sup>Dr.S.MOHANALAKSHMI

Professor and Head Department of Electronics and Communication Engineering Rohini College of Engineering and Technology Palkulam, Variyoor-629401 Kanyakumari District, Tamilnadu.

Dr.S.P.SUBOTHA, M.E., Ph.D Associate Professor Department of Electronics and Communication Engineering Rohini College of Engineering and Technology Palkulam, Variyoor-629401 Kanyakumari District, Tamilnadu.

Submitted for the Phase-2 viva-voce examination held on  $.06 | 09 | 2022_{at}$ Rohini College of Engineering & Technology.

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**JAL EXAMINER** 

# **BONAFIDE CERTIFICATE**

Certified that this Report titled "DESIGN AND ANALYSIS OF RECTANGULAR MICROSTRIP PATCH USING SIMPLE SINGLE GEOMETRY" is the bonafide work of DEEPIKA G (963320403004) who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Signature of the HOD with date

Dr.S.MOHANALAKSHMI,M.E.,Ph.D. Professor and Head Department of Electronics and Communication Engineering Rohini College of Engineering and Technology Palkulam,Variyoor-629401 Kanyakumari District, Tamilnadu.

Signature of Supervisor with date

S.GEETHA,M.E. Assistant Professor Department of Electronics and Communication Engineering Rohini College of Engineering and Technology Palkulam, Variyoor-629401 Kanyakumari District, Tamilnadu

ERNALEXAMINER

## BONAFIDE CERTIFICATE

Certified that this Report titled "CASCADED FUZZY CLUSTERING FOR IMPROVED AND SECURED DATA TRANSMISSION FOR VANET APPLICATIONS" is the bonafide work of ALLEN NISSANTH N (963320403002) who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Signature of the HOD with Date Dr.S.MOHANALAKSHMI, M.E., Ph.D Professor and Head Department of Electronics and Communication Engineering, Rohini College of Engineering and Technology, Palkulam, Variyoor-629401. Kanyakumari District, Tamilnadu.

Signature of Supervisor with date Mr.R.VENKATESH M.E Assistant Professor Department of Electronics and Communication Engineering, Rohini College of Engineering and Technology, Palkulam, Variyoor-629401. Kanyakumari District, Tamilnadu.

EXTERNAL EXAMINER

#### **BONAFIDE CERTIFICATE**

Certified that this Report titled "AN OPTIMIZED HYBRID DEEP LEARNING MODEL FOR RESOURCE ALLOCATION IN 5G NETWORKS" is the bonafide work of MAMATHA L PILLAI (963320403006) who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Signature

Dr.S.MOIIANALAKSIIMI, M.E., Ph.D Professor and Head Department of Electronics and Communication Engineering Rohini College of Engineering and Technology Palkulam, Variyoor-629401 Kanyakumari District, Tamilnadu.



Dr. S. ABISHA, M.E., Ph.D Associate Professor Department of Electronics and Communication Engineering Rohini College of Engineering and Technology Palkulam, Variyoor-629401 Kanyakumari District, Tamilnadu.

Submitted for the Phase-1 viva-voce examination held on .DG. 29.1292 at Rohini College of Engineering & Technology.

VAL EXAMINER

#### **BONAFIDE CERTIFICATE**

Certified that this Report titled "A NEW HYBRID FEATURES RECOGNIZED FOR FACIAL EMOTION USING RANDOM FOREST" is the bonafide work of S.SUJATHA (963320403019) who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

S. Makendeur

Śignature of the HOD with Date Dr.S.MOHANALAKSHMI, M.E., Ph.D Professor and Head Department of Electronics and Communication Engineering Rohini College of Engineering and Technology Palkulam, Variyoor-629401 Kanyakumari District, Tamilnadu. Signature of the Supervisor with Date Dr.E.SREE DEVI, M.E., Ph.D Associate Professor Department of Electronics and Communication Engineering Rohini College of Engineering and Technology Palkulam, Variyoor-629401 Kanyakumari District, Tamilnadu

INTERNAL

#### BONAFIDE CERTIFICATE

Certified that this Report titled "2 DIMENSIONAL ERROR CORRECTION CODE FOR SPACE MEMORY DEVICES" is the bonafide work of SUBHA C P (963320403017) who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Signature of the HOD with Date

Dr.S.MOHANALAKSHMI, Professor and Head Department of Electronics and Communication Engineering Rohini College of Engineering and Technology Palkulam, Variyoor-629401 Kanyakumari District, Tamilnadu. Signature of Supervisor with date Mrs. JASMINE J C SHEEJA, Assistant Professor Department of Electronics and Communication Engineering Rohini College of Engineering and Technology Palkulam, Variyoor-629401 Kanyakumari District, Tamilnadu

Submitted for the Phase-II viva-voce examination held on *D6/D9, 2022*..... at Rohini College of Engineering & Technology.

ley 1/22 EXTERNAL EXAMINER

# **BONAFIDE CERTIFICATE**

Certified that this Report titled "SALIENCY MAPPING FOR **OBJECT** DETECTION USING DEEP LEARNING RBFNN NETWORKS" is the bonafide work of SREE RANGANATHAN R (963320403015) who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Signature of the HOD with Date

Signature of Supervisor with date

Dr.S.MOHANALAKSHMI, M.E., Ph.D Professor and Head Department of Electronics and Communication Engineering, Rohini College of Engineering and Technology. Palkulam, Variyoor-629401. Kanyakumari District, Tamilnadu.

Mr. S.SOBAN, M.E Assistant Professor, Department of Electronics and Communication Engineering. Rohini College of Engineering and Technology. Palkulam, Variyoor-629401. Kanyakumari District, Tamilnadu.

Submitted for the Phase II viva-voce examination held on 

INTERNAL EXAMINER

**VAL EXAMINER** 

#### **BONAFIDE CERTIFICATE**

Certified that this Report titled "AUTOMATIC PREDICTION OF TP53 MUTATION IN PANCREATIC CANCER USING PARTICLE SWARM OPTIMISATION BASED CONVOLUTION NEURAL NETWORK" is the bonafide work of SATHYA S(963320403012) who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Signature of the HOD with Date

Signature of the HOD with Date Dr.S.MOHANALAKSHMI, Professor and Head Department of Electronics and Communication Engineering Rohini College of Engineering and Technology Palkulam, Variyoor-629401 Kanyakumari District, Tamilnadu.

S. Modere Lehren 15/22 Signature of Supervisor with date

Dr.S.MOHANALAKSHMI, Professor and Head Department of Electronics and Communication Engineering Rohini College of Engineering and Technology Palkulam, Variyoor-629401 Kanyakumari District, Tamilnadu

Submitted for the Phase-2 viva-voce examination held on.....06.09.22.... at Rohini College of Engineering & Technology.

## BONAFIDE CERTIFICATE

Certified that this Report titled "DESIGN OF POLARIZATION RECONFIGURABLE PATCH ANTENNA FOR WIRELESS COMMUNICATIONS BASED ON FLUID CONTROL METHOD" is the bonafide work of ANLIN REENA Y (963320403003) who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Signature of the HOD with Dath

Dr.S.MOHANALAKSHMI, M.E.,Ph.D. Professor and Head Department of Electronics and Communication Engineering Rohini College of Engineering and Technology Palkulam,Variyoor-629401 Kanyakumari District,Tamilnadu.

Signature of Supervisor with date Dr.E.SREE DEVI, M.E.,Ph.D Professor Department of Electronics and Communication Engineering Rohini College of Engineering and Technology Palkulam, Variyoor-629401 Kanyakumari District, Tamilnadu

INTER

VAL EXAMINER

#### **BONAFIDE CERTIFICATE**

Certified that this Report titled "A FAST AND ACCURATE ESTIMATION OF CHANNEL AVAILABILITY USING HILBERT TRANSFORM AND HYBRID ML-MMSE EQUALIZER" is the bonafide work of "ABITHA C" (963320403001) who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

S. Makcache hody Juli Signature of the HOD with Date

Dr.S.MOHANALAKSHMI M.E.,Ph.D, Professor and Head Department of Electronics And Communication Engineering Rohini College of Engineering and Technology Palkulam,Variyoor-629401 Kanyakumari District,Tamilnadu.

Signature of Supervisor with date

Dr.S.ABISHA.,M.E.,Ph.D., Associate Professor Department of Electronics And Communication Engineering Rohini College of Engineering and Technology Palkulam,Variyoor-629401

Kanyakumari District, Tamilnadu.

Rohini College of Engineering & Technology.

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(A Division of A B T Limited) 72, Mount Road, Guindy - 600 032. Ph : 044- 42254555 Fax : 044 - 42254575

CERTIFICATE

Date: 03.09.2022

This is to certify that Mr.Parama Sivam K (Reg No:963321631033) second year MBA student of Rohini College Of Engineering and Technology,Palkulam-629401 Kanyakumari District has completed Internship in our organisation. He was regular in his attendance from (06/08/2022 to 03/09/2022) in our company.

During this period his co-operation and performance was excellent.





CHENNAL COMBATORE CALICUT CUDDALORE KARUR MADURAL POLLACHI TRICHY

# BONAFIDE CERTIFICATE

Certified that this Report titled "OPTIMIZED DEEP LEARNING MODEL BASED CHANNEL ESTIMATION FOR MASSIVE MIMO WITH HYBRID TRANSCEIVERS: A META-HEURISTIC APPROACH" is the bonafide work of J S SOWMIYA (963320403014) who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Signature of the HOD with Date

Dr.S.MOHANALAKSHMI Professor and Head Department of Electronics and Communication Engineering Rohini College of Engineering Technology Palkulam, Variyoor- 629401 Kanyakumari District, Tamil Nādu. Signature of Supervisor with date Dr.T. SUDARSON RAMA PERUMAL Associate Professor Department of Electronics and Communication Engineering Rohini College of Engineering and and Technology Palkulam, Variyoor-629401 Kanyakumari District, Tamil Nādu

Submitted for the Phase-1 viva-voce examination held on <u>6992022</u> at Rohini College of Engineering & Technology.

# **ANNA UNIVERSITY : CHENNAI 600 025**

# **BONAFIDE CERTIFICATE**

Certified that this project report "SECURED COMMUNICATION AND ENERGY EFFICIENT FOR VANET USING LOCATION DEPENDENT KEY MANAGEMENT" is the bonafide work of "LNITHYA SREE (963317106064), C.ISHA (963317106040)" who carried out the project work under my supervision.

S. Miten delastap

SIGNATURE Dr.S.MOHANALAKSHMI, M.E., Ph.D. HEAD OF THE DEPARTMENT Professor & Head Department of Electronics and Communication Engineering Rohini College of Engineering & Technology Palkulam, Variyoor (Post) Kanyakumari - 629 401.

((1000 31/3/2021 SIGNATURE

Assistant Professor

Mr.C.K.MORARJI, M.E., (Ph.D.) SUPERVISOR

Department of Electronics and Communication Engineering Rohini College of Engineering & Technology Palkulam, Variyoor (Post) Kanyakumari - 629 401.

EXTERNAL EXAMINER

#### BONAFIDE CERTIFICATE

Certified that this Report titled "PADDY DISEASE IDENTIFICATION USING DEEP. CNN WITH RESNET50" is the bonafide work of SHIJOV.THOMAS (963320403013) who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Signature of the HOD with Date

Dr.S.MOHANA LAKSHMI,M.E.,Ph.D, Professor and Head Department of Electronics and Communication Engineering Rohini College of Engineering and Technology, Palkulám, Variyoor-629401

Kanyakumari District, TamilNadu.

Signature of Supervisor with Date

Dr.T.SUDARSON RAMA PERUMALM.E.,Ph.D, Associate professor Department of Electronics and Communication Engineering Rohini College of Engineering and Technology, Palkulam, Variyoor-629401 Kanyakumari District, TamilNadu.

Submitted for the Phase-2 viva-voce examination held on <u>6</u>/09/2022 at Rohini College of Engineering & Technology.

Mer 16/2/22

#### **BONAFIDE CERTIFICATE**

Certified that this Report titled "THE EFFECTIVE PAPR REDUCTION TECHNIQUE USING PERFECT RANDOM SEQUENCES FOR 5G TECHNOLOGY" is the bonafide work of SUGUMAR M (963320403018) who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Signature of the HOD with Date

Dr.S.MOHANALAKSHMI, M.E., Ph.D Professor and Head Department of Electronics and Communication Engineering, Rohini College of Engineering and Technology, Palkulam, Variyoor-629401. Kanyakumari District, Tamilnadu. Signature of Supervisor with date Mr.R.VENKATESH M.E Assistant Professor Department of Electronics and Communication Engineering, Rohini College of Engineering and Technology, Palkulam, Variyoor-629401. Kanyakumari District, Tamilnadu.

INTERNAL EXAMINER

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