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ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade
Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)



Certificate

Certified that the Project Work entitled "IMPROVING OUTDOOR EMERGENCY LOCATION IDENTIFICATION WITH RURAL AND REMOTE CONNECTIVITY FOR EFFICIENT ROUTING" carried out by ARYA SINHA (ISG20CS016), AVEEK CHAKRABORTY (ISG20CS018), CHANDANA D S (ISG20CS025), CHANDANA V (ISG20CS026), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the Guide

Dr. Kamalakshi Naganna Professor & Head Signature of the HOD Dr. Kamalakshi Naganna

. Kamalakshi Naganna Professor & Head Signature of the Principal Dr. H Ramakrishna Principal

EXTERNAL EXAMINATION:

Name of the Examiners

1. Mrs. Mari B. A. 2 N. Kamala Kehi Haganna Signature with Date

B ve 24/5/24

Sapthagiri College of Engineerin

Bengaluru - 560 057

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Department of Computer Science and Engineering

(Accredited by NBA)



Certificate

Certified that the Project Work entitled "INTELLIGENT MULTI-CHANNEL THREAT DETECTION FOR ENHANCED DATA SECURITY USING DEEP LEARNING" carried out by ARPITHA R (1SG20CS015), CHAITRA D (1SG20CS023), DIVYA B S (1SG20CS033), HRUTHKARSHA D S (1SG20CS047), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Dr. Praveen Kumar K V

EXTERNAL EXAMINATION:

Name of the Examiners

Professor

Signature of the HOD

Dr. Kamalakshi Naganna

Professor & Head

Signature of the Principal

Dr. Lamakrishna

Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road

Bangalore-560 057

Signature with Date

1. Mu. Vani B.A. Dr Kamalakshi Ilaganna

Principal Sapthaglri College of Engineering 14/5, Chikkasardra, Hesaraghatta Main Roa-Bengaluru - 560 057

(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi.) ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade Bengaluru-560057

Department of Computer Science and Engineering

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Certificate

Certified that the Project Work entitled "PREDICTIVE ANALYSIS OF POLYCYSTIC OVARY SYNDROME DAIGNOSIS WITH MACHINE LEARNING" carried out by ARCHANA G (1SG20CS012), ARCHANA S (1SG20CS013), ARPITHA M N (1SG20CS014), JYOTHI N (1SG20CS050), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work (18CSP83) prescribed for the said degree.

Signature of the Guide Prof. Hemalatha K Assistant Professor

EXTERNAL EXAMINATION:

Name of the Examiners

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head

Signature of the Principal Dr. H Ramakrishna Principal

Principal

Sapthagirl College of Engineering Chikkasandra, Hesaraghatta Road Bangalore-560 057

Signature with Date

Principal

othagiri College of Engineeri 14/5, Chikkasandra, Hesaraghatta Main Ro

Bengaluru - 560 0007

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Department of Computer Science and Engineering

(Accredited by NBA)



Certificate

Certified that the Project Work entitled "AUTISM SPECTRUM DISORDER PREDICTION USING MACHINE LEARNING" carried out by MONISHA P S (1SG20CS062), NISARGA S (1SG20CS068), NUHUSHAN SHAREEF S (1SG20CS070), SNEHA S (1SG20CS102) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Dr. Madhavi Dasari Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head

Signature of the Principal Dr. H Ramkrishna Principal

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

Principal Sapthagiri College of Engineering

14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru - 560 057

(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi.) ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)



Certificate

Certified that the Project Work entitled "Arrhythmia Disease Diagnosis Based on ECG Time-Frequency Domain Fusion and CNN" carried out by KUMUDHA H I (1SG20CS059), NISARGA S (1SG20CS115), SANDHYA M (1SG19C\$407), TEJASWINI M (1SG21CS415), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Nurthour Col Signature of the Guide Prof. Vyshnavi M Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head

Signature of the Principal Dr. H. Hamakrishna Principal Sapthagiri College of Engineering

Chikkasandra, Hesaraghatta Road, Bangalore-560 057

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

Sapthagiri College of Engineering 14/5, Chikkasardra, Hesaraghatta Main Road Bengaluru - 560 057

(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi.)
ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade
Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)



Certificate

Certified that the Project Work entitled "DISTRACTED DRIVER RECOGNITION USING KNOWLEDGE DISTILLATION FRAMEWORK" carried out by APOORVA V (18G20CS011), BHOOMIKA D K (18G20CS022), DIVYA N (18G20CS034), KHUSHI SHEKHAR T C (18G20CS055), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment havebeen incorporated in the report deposited in the Department Library. The project report has been approved as itsatisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the Guide Prof Anuradha B Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head Signature of the Principal Dr. Kamakrishna Principal

EXTERNAL EXAMINATION:

Name of the Examiners

Dr. Vandaketa Alexanna

Signature with Date

(B) veis 27/5/24 Kees 27/5/2020

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru - 560 057

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Certificate

Certified that the Project Work entitled "SKIN CANCER DETECTION REDEFINED: HARNESSING THE POWER OF IMAGE PROCESSING AND MACHINE LEARNING" carried out by KAVANA V (1SG21CS408), K S TANMAYI (1SG21CS406), VINDHYA G (1SG20CS111), SANGEETHA G (1SG20CS093), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment havebeen incorporated in the report deposited in the Department Library. The project report has been approved as itsatisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the Guid Prof. Shwetha K Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head

00

Signature of the Principal Dr. H. Kamakrishna

Principal Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road, Bangalore-560 057

EXTERNAL EXAMINATION:

Name of the Examiners

ΛΛ ι Λ

1. Mrs. Vanikos.
2. Dr. Kamalakoli Naganna

Signature with Date

Q 10: 21/5/21/ Legs

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Certificate

Certified that the Project Work entitled "A HOLISTIC APPROACH ON AIRFARE PRICE PREDICTION" carried out by PAVITHRA B L (1SG20CS074), SHARATH Y P (1SG20CS095), SHILPA G P (18G20CS098), VIPIN K S (18G20CS112), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work (18CSP83) prescribed for the said degree.

Signature of the Guide Prof. Shwetha A B Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head

Signature of the Principal Dr. H Damakrishna rincipal

Principal Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road Bangalore-560 057

Signature with Date

Name of the Examiners

EXTERNAL EXAMINATION:

1. Mrs. Vani B.A. 200 Kamalakshi Naganne

14/5, Chikkasandra, Hesaraghatta Main Road

Bengaluru - 560 057

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Bengaluru-560057

Department of Computer Science and Engineering

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Certificate

Certified that the Project Work entitled "Unified Framework for Safeguarding Cloud Computing through Blockchain Integration" carried out by ANKUSH GOWDA R (1SG20CS009), BHASKAR P (1SG20CS021), CHANDU T R (1SG20CS027), K SARAVANAN (1SG20CS051), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the Guide Prof. Vyshnavi M Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head Signature of the Principal Dr. H Ramakrishna Principal

Chikkasandra, Hesaraghatta Road Bangalore- 560 657

EXTERNAL EXAMINATION:

Name of the Examiners

Dr. Anitha T-G

Dr. S. R. Nayak

Signature with Date

6 20(0) 10002

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Bengaluru - 560 057

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ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade
Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)



Certificate

Certified that the Project Work entitled "DEEP CONVOLUTIONAL CURVELET TRANSFORM-BASED MRI APPROACH FOR EARLY DETECTION OF ALZHEIMER'S DISEASE" carried out by DEEPTHI S(1SG20CS028), DEEPTHI S HEGDE(1SG20CS029), HARSHITHA J (1SG20CS044), HITHAISHI S(1SG20CS045) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the Guide Dr. Anitha T G Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head

Santhagiri (

EXTERNAL EXAMINATION:

Signature of the Principal

Or. H Ramakrishna

Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road

Bangalore-560 057

Signature with Date

Name of the Examiners

1. Dr. Anitha FG.

2. Dr. S.R. Nayor

Dorrage 28/05/2024

Sapthagiri College of Engineering

asarora, Hesaraghatta Main Roar Bengaluru - 560 057

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Department of Computer Science and Engineering

(Accredited by NBA)



Certificate

Certified that the Project Work entitled "Militant Intrusion Detection using Machine Learning" carried out by CHETHAN K M (1SG20CS404), K KIRAN KUMAR (1SG21CS405), NISHCHITHA B G (1SG21CS412), YASHASWINI P REDDY (1SG21CS417), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Dr. Praveen Kumar K V

Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head

Signature of the Principal Dr. H.Ramakrishna

Principal Principal Sapthagirl College of Engineering Chikkasandra, Hesaraghatta Road Bangalore-560 057

EXTERNAL EXAMINATION:

Name of the Examiners

2. Dr. S. R. Nayak

Signature with Date

Principal Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru - 560 057

(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi.) ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)



Certificate

Certified that the Project Work entitled "HEART DISEASE PREDICTION USING NOVELQUINE McCLUSKEY BINARY CLASSIFIER" carried out by PREETHAM S G (1SG20CS082), SANTHOSH D (1SG20CS094), SHRAVAN L (1SG20CS100), VIVAN KUSHAL HENEGER (ISG20CS114), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment havebeen incorporated in the report deposited in the Department Library. The project report has been approved as itsatisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Prof Shwetha K Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head

Signature of the Principal Dr. H Ramakrishna Principal

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

Principal Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Roac

Bengaluru - 560 re

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(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi.) ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)



Certificate

Certified that the Project Work entitled "MalJPEG DETECTION USING MACHINE LEARNING" carried out by BADAL KUMAR (1SG20CS019), FAHAD MOHAMMED (1SG20CS036), GAURAV SINGH (ISG20CS039), GAURAV YADAV (ISG20SG040), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Madhan D. Signature of the Guide Dr. Madhavi Dasari Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head

Signature of the Principal Dr. H Ramakrishna

Printingipal Sapthagiri College of Enginedring Chikkasandra, Hesaraghatta Rold Bangalore- 560 057

EXTERNAL EXAMINATION:

Name of the Examiners

2. Dr. Kamalakshi Naganna

Signature with Date

Principal Sapthagiri College of Engineering

14/5, Chikkasandra, Hesaraghatta Main Roa Bengaluru - 560 057

(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi.) ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)



Certificate

Certified that the Project Work entitled "DIAGNOSIS OF VITAMIN DEFECIENCY IN HUMAN BEINGS USING DNN ALGORITHM" carried out by N.PANDURANGE GOWD (1SG20CS063), NAVNEET NAMAN (1SG20CS065), PRAKHAR SURAJ (1SG20CS078), VIDISH GUPTA (1SG20CS110), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment havebeen incorporated in the report deposited in the Department Library. The project report has been approved as itsatisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the G Prof Hemalatha K Assistant Professor

Signature of the Dr. Kamalakshi Naganna Professor & Head

Signature of the Principal Dr. H Ramakrishna Principal

EXTERNAL EXAMINATION:

Name of the Examiners

1. Dr. Aniska T-G. 2. Dr. S. R. Nayak

Signature with Date

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru - 560 057

(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi.)
ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade
Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)



Certificate

Certified that the Project Work entitled "SMART AEROPONICS SYTEM USING IOT AND ML" carried out by PAVITHRA H(1SG20CS075), SHILPA BIRADAR(1SG20CS097), VANDANA M S (1SG20CS108). VARSHITHA C(1SG20CS109), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the Guide Prof. Madhushree Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head

Signature of the Principal Dr. H Ramakrishna Principal

EXTERNAL EXAMINATION:

Name of the Examiners

2. Dr S. R. Nayal

Signature with Date

Ath solos/24

Bran 28/05/2024

Sapthagiri College of Engineering

14/5, Chikkasandra, Hesaraghatta Main Roe Bengaluru - 560 057

(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi.) ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)



CERTIFICATE

Certified that the Project Work entitled "PARKINSON'S DISEASE PREDICTION FROM MRI IMAGES USING THE EFFICIENTNET B3 DEEP LEARNING MODEL" carried out by AISHWARYA LAKSHMI R (1SG20CS005), DYUTHI A I (1SG20CS035), KEERTHANA S (1SG20CS054), NIKSHITHA K (1SG20CS067), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as itsatisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the Guide Prof Nagarathna C **Assistant Professor** Dept of CSE, SCE

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head Dept of CSE, SCE

Signature of the Principal Dr. H Ramakrishna Principal

Principal

Sapthagirl College of Engineering Chikkasandra, Hesaraghatta Road Bangalore-560 057

Signature with Date

1. Dr. Anitha T.G. 2. Dr. S. R. Wayak

EXTERNAL EXAMINATION:

Name of the Examiners

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Roac Bengaluru - 560 057

(Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi.)
ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade
Bengaluru - 560057

Department Of Computer Science and Engineering

(Accredited by NBA)



Certificate

Certified that the Project Work entitled "EARLY DETECTION OF CARDIAC ARREST IN NEWBORN BABIES AND RECOMMENDATION OF TREATMENT IN CICU" carried out by H N NITHYASREE (1SG20CS041), KAVYA S (1SG20CS053), KRUTHI S (1SG20CS057), MANASA K G (1SG20CS061), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the Guide Prof. Sheela Rani C M Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head Signature of the Principal

Dr. H Ramakrishna

Principal rincipal

Sapthagiri College of Engineer

Chikkasandra, Hesaraghatta Ros

Bangalore-560 057

EXTERNAL EXAMINATION:

Name of the Examiners

1. Dr. AnithaTq

2. Dr. S. R. Mayale

Signature with date

Sapthaglri College of Engineering

(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi.) ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)



Certificate

Certified that the Project Work entitled "IOT BASED - BED CONTROL AND HEALTH MONITORING SYSTEM" carried out by AISHWARYA S (1SG21CS400), DUSHYANTH G (1SG21CS402), H V MANOJ KUMAR (1SG21CS403), KARAN S NAIDU (1SG21CS407), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the Guide Prof Nagarathna C Assistant Professor Dept. of CS&E, SCE

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head Dept. of CS&E, SCE

Signature of the Principal Dr. H. Ramakrishna Principal Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road Bangalore-560 057

EXTERNAL EXAMINATION:

Name of the Examiners

1. Dr. Anitha Tq 2. Dr. S. R. Nayak

Signature with Date

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru - 560 057

(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi.)
ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade
Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)



Certificate

Certified that the Project work entitled "OPTIMIZED META-HEURISTICS ALGORITHMS FOR ORAL CANCER DETECTION" carried out by NAGARAJU K (1SG20CS064), MANISHA K (1SG21CS409), RACHANA N B (1SG21CS413), S VINODKUMAR (1SG20CS089) bonafide students of Sapthagiri College of Engineering Bengaluru, in partial fulfillment of the award of Bachelor of Engineering in Computer Science & Engineering of the Visvesvaraya Technological University, Belagavi during the year 2023-24. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said Degree.

Signature of the Guide Dr. Kamalakshi Naganna Professor & Head

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head

Signature of the Principal Dr. H Ramakrishna Principal

EXTERNAL EXAMINATION:

Name of the Examiners

. Dr. Anisha T.G.

2 Janualla, HiTA

Signature with Date

Paul 2/s/2

(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi.) ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)



Certificate

Certified that the Project Work entitled "MALARIA DETECTION USING CNN AND ELM" carried out by ABHISHEK G B (1SG20CS001), ABHISHEK K J (1SG20CS002), CHANDAN C S (1SG20CS024), GANESH HP (1SG20CS037), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment havebeen incorporated in the report deposited in the Department Library. The project report has been approved as itsatisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature Prof. Shwetha K Assistant Professor

EXTERNAL EXAMINATION:

Name of the Examiners

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head

Signature of the Principal Dr. H Kamakrishna Principal Principal

Sapthagirl College of Engineering Chikkasandra, Hesaraghatta Road Bangalore-560 057

Signature with Date

Principal Sapthaglri College of Engineering

14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru - 560 057

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ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade
Bengaluru-560057

Department of Computer Science and Engineering

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Certificate

Certified that the Project Work entitled "ENSEMBLE-LEARNING FRAMEWORK FOR INTRUSION DETECTION TO ENCHANCE INTERNET OF THINGS' DEVICES SECURITY" carried out by POORNIMA T (1SG20CS076), S MEHAK AFREEN (1SG20CS088), SAHANA N (1SG20CS091), SHREYA SHETTY S (1SG20CS101), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment havebeen incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the Guide Prof. Kokila B P Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head

Signature of the Principal Dr. H Ramakrishna Principal

EXTERNAL EXAMINATION:

Name of the Examiners

. Dr. Anitha T-G

2. Paritha, H.M

Signature with Date

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Certificate

Certified that the Project Work entitled "A NOVEL COLLABORATIVE LEARNING MODEL FOR CYBERATTACK DETECTION SYSTEMS IN IOT NETWORKS" carried out by AISHWARYA SINGH (1SG20CS006), ANSTIN GEORGE (1SG20CS010), DEEPTI KULKARNI (1SG20CS030), JISHNU JAYADEVAN (1SG20CS049), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The projectreport has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the Guide Mrs. Shwetha A B Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head Signature of the Principal Dr. II Ramakrishna Principal

EXTERNAL EXAMINATION:

Name of the Examiners

1. Dr. Anitha TG

2. Langella, Him

Signature with Date

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Bengaluru— 560 057

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Certificate

Certified that the Project Work entitled "Morse code based Authentication employing Gaze based password entry using Machine Learning" carried out by Akshay Kumar Joshi (1SG20CS008), Devadutta B R (1SG20CS031), Dhanraj P (1SG20CS032), Jayanth M (1SG20CS048), bonafide students of Sapthagiri college of engineering in the partial fulfillment for the award of Bachelor of Engineering degree in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the Guide Dr. Anitha T G Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head Signature of the Principal Dr. H Ramakrishna Principal

EXTERNAL EXAMINATION

Name of the Examiners

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2 Langtha, fe, M

Signature with date

Dr. Amilla TG

Dan Walshy

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Certificate

Certified that the Project Work entitled "DIABETES EARLY READMISSION PREDICTION" carried out by ADITYA SINGH (1SG20CS004), AKASH PUJARI (1SG20CS007), HARSH KUMAR (1SG20CS042), KISHAN KUMAR (1SG20SG056), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the Guide Dr. Madhavi Dasari **Assistant Professor**

EXTERNAL EXAMINATION:

Name of the Examiners

Dr. Kamalakshi Naganna Professor & Head

Signature of the Principal Dr. H Ramakrishna Principal Principal

Sapthagirl College of Engineering Chikkasandra, Hesaraghatta Road Bangalore-560 057

Signature with Date

Principal Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Rose Bengaluru - 560 057

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Certificate

Certified that the Project Work entitled "IoT Based Railway Safety Management System" MANOJ S (1SG21CS410), MARUTHI G (1SG21CS411), SAGAR T (1SG21CS414), TRIVENI B G (1SG21CS416), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the Guide Prof.Anuradha B Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head

Signature of the Principal Dr. H.Ramakrishna Priffeipelpal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road, Bangalore-560 057

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

thagiri College of Engineering

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CERTIFICATE

Certified that the Project Work entitled "KNEE OSTEOARTHRITIS DETECTION USING IMPROVED CENTERNET AND PIXEL-WISE VOTING SCHEME" carried out by PRADEEPKUMAR S (1SG20CS077), SHIVUROOPESH M (1SG20CS099), SURYAKANT (1SG20CS105), VISHWAS H R (1SG20CS113) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment havebeen incorporated in the report deposited in the Department Library. The project report has been approved as itsatisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the Guide Prof Nagarathna C Assistant Professor Dept of CSE, SCE

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head Dept of CSE, SCE

Signature of the Principal
Dr. H Ramakrishna
Principal Principal
Sapthagirl College of Engineering

Chikkasandra, Hesaraghatta Road Bangalore- 560 057

EXTERNAL EXAMINATION:

Name of the Examiners

1. Dr. Anitha T-G

2. glassika, H.M

Signature with Date

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Certificate

Certified that the Project Work entitled "DEEPFAKE DETECTION USING DEEP LEARNING ALGORITHMS" carried out by ADITYA ADIGA K (1SG20CS003), NAVEEN KUMAR M(1SG19CS067),PAVAN R (1SG20CS073), PRAMOD KUMAR S J(1SG20CS080), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that allcorrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the Guide Prof. Madhushree Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head Signature of the Principal Dr. H. Ramakrishna Principal

EXTERNAL EXAMINATION:

Name of the Examiners

Do Aika TC

2. Lougitha H.M.

Signature with Date

Paul 29/5/24

Principal
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Certificate

Certified that the Project Work entitled "DESIGN & DEVELOPING HYBRID MODEL FOR GLAUCOMA DETECTION" carried out by KAVIRAJ J (1SG20CS052), DHANUSH Y T (1SG21CS401), JASWANTH ARADHYA S (1SG21CS404), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as itsatisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the Guide Prof Kokila B P Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head Signature of the Principal Dr. H Ramkrishna Principal

EXTERNAL EXAMINATION:

Name of the Examiners

1. Dr. Anitha Ta

2. Langitha. K.M

Signature with Date

Principal

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Certificate

Certified that the Project Work entitled "FORGERY FREE LEARNING OF DYNAMIC SIGNATURE REPRESENTATION BY SynSig2Vec & IDCNN" carried out by PRAMIT KUMAR MANDAL (1SG20CS079). RISHAV ANAND (1SG20CS086), SAKSHEE SINGH (1SG20CS092). TSEWANG CHOSKIT (1SG20CS106), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the Guide Dr. Praveen Kumar KV Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head

Signature of the Principal Dr. H Ramakrishna Principal

EXTERNAL EXAMINATION:

Name of the Examiners

. Dr. Anitha Ta

2. Vas alakshui so

Signature with Date

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Certificate

Certified that the Project Work entitled "OPTIMIZED SYSTEM FOR SECURE PASSWORD MANAGER USING HONEY ENCRYPTION" carried out by NAWEEL MANJOOR (ISG20CS066),NISHANT P CHOUHAN (ISG20CS069),PUSPHPENDER KUMAR (ISG20CS084), RAKSHITH GC (ISG20CS085), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2023-2024. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II (18CSP83) prescribed for the said degree.

Signature of the Guide Prof. Sheela Rani CM Assistant Professor

Signature of the HOD Dr. Kamalakshi Naganna Professor & Head

Signature of the Principal Dr. H Ramakrishna Principal

EXTERNAL EXAMINATION:

Name of the Examiners

Dr. Anitha T. G

2. Varaleitshui po

Signature with Date

vezo/s/m

Principal

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