SAPTHAGIRI COLLEGE OF ENGINEERING

Affiliated to Visvesvaraya Technological University, Belagavi and Approved by AICTE-New Delhi)
(Accredited by NAAC with "A" Grade)
(ISO 9001:2015 & ISO 14001:2015 Certified)

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

VIII SEM PROJECT   Academic year-2021-22

BATCH LIST WITH PROJECT TITLE

SI No	USN	NAME OF THE STUDENT	TITLE OF THE PROJECT
1	1SG18CS068	Pallavi R	Cost effective Smart IOT based gate controller for Agriculture Irrigation System
	1SG18CS069	Panchami A	
	1SG18CS079	Priyanka V	
	1SG18CS100	Shalini G S	
2	1SG18CS045	Mandara B	Human image captioning using deep learning
	1SG18CS035	Himani Adiga	
	1SG18CS046	Mangala S	
	1SG18CS044	Mallikarjun V R	
3	1SG19CS400	Amit Kumar Gupta	Self Balancing Robot
	1SG18CS056	Mohit Verma	
	1SG18CS024	Deepak G	
	1SG18CS007	Aditya Srivastava	
4	1SG18CS072	Pranav Parth	Analysis of Fake Job Posting
	1SG18CS085	Rishu Raj	
	1SG18CS086	Ritik Saini	
	1SG18CS119	Swapnil	
5	1SG18CS015	Arpitha H K	Health monitoring system with smart medical kit for elderly people
	1SG18CS018	Bhoomika S	
	1SG18CS023	Deepak B K	

			wildlife monitoring using object detection
	1SG19CS403	Kiran Kumar H M	
6	1sg18cs098	Sarika kashyap	
	1sg18cs089	Rohit Rai	
	1sg18cs064	Nimisha Nirmal	
	1SG18CS051	Meena Alekhya T	

Sl.No	USN	Student Name	Project Title
7	1SG18CS014	Apoorva A	Developing a Prediction Model for Cotton Leaf Diseases using Deep Learning Technique
	1SG18CS030	Fouzia Anjum S	
	1SG18CS039	Kumari Madhu	
8	1SG18CS005	Aditya M	IOT Based Power Transmission Fault Detection using Blynk Cloud
	1SG18CS017	Kulkarni	
	1SG18CS021	Darshan K S	
	1SG18CS048	Naik	
9	1SG18CS132	Nithin S M	Crypto-currency price prediction
	1SG18CS133	Varun R	
	1SG19CS404	Manjunath M	
	1SG18CS061	Naveen S R	
10	1SG18CS122	Upma Maurya	Disaster Survival Prediction using Machine Learning
	1SG18CS114	Srishti Kumari	
	1SG18CS108	Simran Mahto	
	1SG18CS093	Choudhary	
11	1SG18CS107	Siddhant Pandey	Identification of Diabetic Retinopathy using Image Processing.
	1SG18CS106	Shubhashish Pathak	
	1SG18CS111	Snehal Mishra	
12	1SG18CS080	Priyanshu kumar	Phishing detection using Machine Learning
	1SG18CS011	Ankit Raj Mishra	
	1SG18CS123	Utkarsh Gaurav	
	1SG18CS033	Harshit Gupta	
13	1SG18CS031	Gaurav Gupta	customer churn prediction for Telecom
	1SG18CS028	Kushwaha	
	1SG18CS134	Sushmitha N	
14	1SG18CS131	Sahana P	Emphasized smart handwriting recognizer to facilitate e-learning tool
	1SG18CS077	Preethu T B	
	1SG18CS113	Sriraksha G	
15	1SG18CS125	Vivek Kumar Patel S	Footprint AI Engine
	1SG18CS099	Shahadat Hussain	
	1sg18cs070	Paramjeet Singh	
	1sg18cs095	Sahil Aryan	

Sl.No	USN	Name	Project Title
16	1SG18CS052	Megha.P	Obstacle Detection and Home Appliances control using Smart Wheelchair for Crippled Patients
	1SG18CS054	Meghana.G	
	1SG18CS059	Madhuravani.N	
	1SG18CS062	Navyashree.K	
17	1SG18CS084	Revathi D	Intelligent Reader for Visually Impaired People
	1SG18CS127	Yashaswini S	
	1SG18CS012	Anusha D B	
	1SG18CS037	K U Anjali	
18	1SG18CS130	Drithi R	assification of covid-19 or pneumonia using chest X-Ray images by applying deeplearning algorithms and A
	1SG18CS129	Rakshitha D	
	1SG18CS090	Roopa U	
	1SG18CS038	Koushik V Uppuluri	
19	1SG18CS041	Likith S	healthcare chatbot
	1SG18CS042	Reddy	
	1SG18CS049	Manu K N	
	1SG18CS013	Aparna Singh	
20	1SG18CS034	Harshitha S	Early prediction of Diabetes using machine learning
	1SG18CS036	Vyshnavil	
	1SG18CS043	Madhuri M.K	
21	1SG19CS408	Shivakumar R.E	Pest Detection and Obliteration based robotic system
	1SG19CS409	Varsha H.G	
	1SG19CS412	Yuvaraj N R	
	1SG18CS063	Neetu Rao D	
22	1SG18CS020	Bindu L	Liveness net and face antispoofing system
	1SG18CS057	Monika A	
	1SG18CS001	A Y Gunarachana	
23	1SG18CS026	Deepthi Yadav G	Identification and Classification of brain tumor using Kaggle datasets
	1SG18CS047	Manisha L	
24	1SG18CS009	Akshatha M	Agrosmart
	1SG18CS060	Namratha	
	1SG16CS003	Abdul Haroon Khan	
	1SG16CS037	Harshitha J	

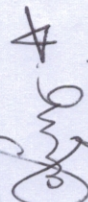| Sl. No	USN	Name	Project Title
25	1SG18CS002	Aakash Waza	Image Based Search Engine
	1SG18CS055	Mohit Kumar Shaw	
	1SG18CS029	Faraz Khan	
	1SG18CS027	Devashish	
26	1SG18CS075	Preetha S Jois	Retinal disease screening through local binary patterns
	1SG18CS128	Kotegar	
	1SG18CS121	Thanushree K J	
	1SG18CS118	Supriya K	
27	1SG18CS101	Shanu himkar	chronic kidney disease prediction using machine learning algorithm
	1SG18CS066	Nishant rana	
28	1SG188CS078	Prerana Shetty	Tool for evaluating subjective answers using AI
	1SG18CS083	Rashmitha.P	
	1SG18CS112	Sonali.M	
	1SG19CS405	Rakshitha M	
29	1SG18CS116	Suprith KS	Stock Market prediction using ML and sentiment analysis
	1SG18CS105	Shreyas.V.Rao	
	1SG18CS065	Niranjan S	
	1SG18CS091	S Mohit	
30	1SG17CS085	Sneh kumar rai	Fire Gun Violence based Anomaly Detecation Syatem Using Deep Neural Networks
	1SG17CS093	Sushant	
	!SG17CS002	singh	
31	1SG18CS076	Preethi U	Sign Language Recognition Using OpenCV
	1SG18CS097	Sangeetha R	
	1SG19CS401	Anusha S	
	1SG19CS410	Varshitha T M	
32	1SG18CS088	YC	REAL-TIME POTHOLE DETECTION
	1SG18CS092	S R Prashanth	
33	1SG18CS124	Vishal Sai R	Image restoration and upsacaling
	1SG18CS094	sagar k	
	1SG18CS082	Rakesh S	
	1SG18CS126	Yasha Niranjan	

Sl No	USN	Name	Project Title
34	1SG18CS117	Supriya B Tavanshi	Food Clasification using Deep Learning
	1SG18CS115	Suhas G C	
	1SG18CS110	Siri M Kashipathi	
35	1SG18CS103	Shivansh	Human emotion detection
	1SG18CS104	Shoib Akhtar	
36	1SG18CS010	Amandeep Singh	Automated Door System integrated with Face-Mask and ID Card Detection using Deep Learning Approach
	1SG18CS025	Deepak Sah	
	1SG18CS040	Lalit Mudgal	
	1SG18CS050	Mayank	
37	1SG18CS087	Rohan Kumar	Genetic programming for hate speech detection on social media
	1SG18CS096	Sakshi Sheoran	
	1SG18CS109	Simran Verma	
38	1SG18CS006	Aditya Sharma R	Face Detection And Monitoring In multiple surveillance footage using convolution neural networks
	1SG18CS016	Aruna Kumar	
	1SG18CS032	Harsh P Kavatekar	
39	1sg15cs016	Bhavya K H	Automatic Vibration Device for Stroke Patients
	1sg16cs408	Mano R	
	1sg17cs097	J	
40	1SG18CS074	Prathik N	Preterm Birth Risk Detection System
	1SG18CS081	Goverdhan R	
	1SG18CS0102	Sherwin E	

Co-ordinators Signature

Dr. Lavanya N L

Mrs. Swetha B N

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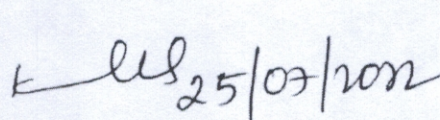ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade
Bengaluru-560057

Department of Computer Science and Engineering
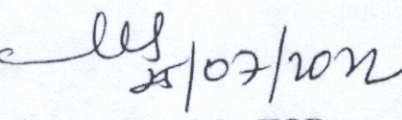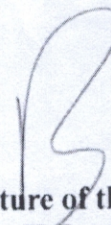
(Accredited by NBA)

SAPTHAGIRI
College of Engineering

Certificate

Certified that the Project Work entitled "COST EFFECTIVE SMART IOT BASED GATE CONTROLLER FOR AGRICULTURAL IRRIGATION SYSTEM" carried out by PALLAVI R (1SG18CS068), PANCHAMI A (1SG18CS069), PRIYANKA V (1SG18CS079), SHALINI G S (1SG18CS100), 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 2021-2022. 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.

25/07/2022   25/07/2022

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

EXTERNAL EXAMINATION:

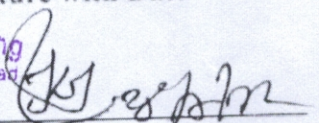**Name of the Examiners**   Principal   **Signature with Date**
Sapthagiri College of Engineering
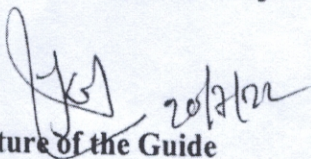14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057

1. Dr. Praveen Kumar

SAPTHAGIRI COLLEGE OF ENGINEERING

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Bengaluru-560057

Department of Computer Science and Engineering
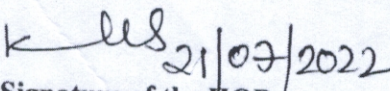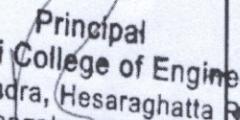
(Accredited by NBA)

SAPTHAGIRI
College of Engineering
Creating Tomorrow

Certificate

Certified that the Project Work entitled "IMAGE ACTIVITY TRANSFORMATION INTO READABLE CAPTION USING DEEP LEARNING ALGORITHM" carried out by HIMANI ADIGA (1SG18CS035), MALLIKARJUNA V R (1SG18CS044), MANDARA B (1SG18CS045), MANGALA S (1SG18CS046), 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 2021-2022. 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

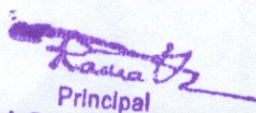**Signature of the HOD**
Dr. Kamalakshi Naganna
Professor & Head

Principal
Sapthagiri College of Enginee
Chikkasandra, Hesaraghatta Rc
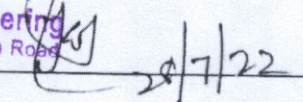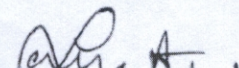**Signature of the Principal**
Dr. H Ramakrishna
Principal

EXTERNAL EXAMINATION:

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

Name of the Examiners	Signature with Date
1. Dr. Praveen Kumar kv	20/7/22
2. Dr. Lavanya N.L	Dr. A.

SAPTHAGIRI COLLEGE OF ENGINEERING

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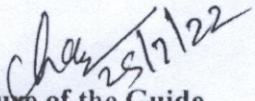ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade
Bengaluru-560057
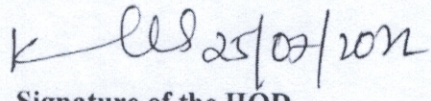
Department of Computer Science and Engineering
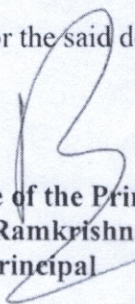
(Accredited by NBA)

Certificate

Certified that the Project Work entitled **"TWO WHEEL SELF BALANCING ROBOT"** carried out by **ADITYA SRIVASTAVA (1SG18CS007), AMIT KUMAR GUPTA(1SG19CS400),DEEPAK G (1SG18CS024) MOHIT VERMA (1SG18CS056)** 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 2021-2022. 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.
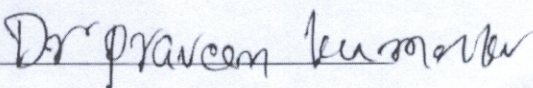
Signature of the Guide
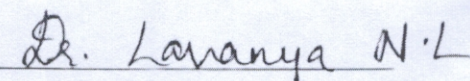Prof. Chaithra
Associate Professor

Signature of the HOD
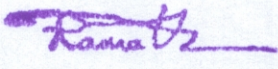Dr. Kamalakshi Naganna
Professor & Head

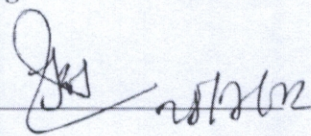**Signature of the Principal**
Dr. H Ramkrishna
Principal

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

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. Dr Praveen kumar kr

2. Dr. Lavanya N L
28/7/22

SAPTHAGIRI COLLEGE OF ENGINEERING

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Bengaluru-560057

Department of Computer Science and Engineering

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SAPTHAGIRI
College of Engineering

Certificate

Certified that the Project Work entitled **"FAKE JOB PREDICTION"** carried out by PRANAV PARTH (1SG18CS072), RISHU RAJ (1SG18CS085), RITIK SAINI (1SG18CS086), SWAPNIL (1SG18CS119), 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 2021-2022. 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. LATHA A
Assistant Professor

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head

Signature of the Principal
Dr. H Ramkrishna
Principal

EXTERNAL EXAMINATION:

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

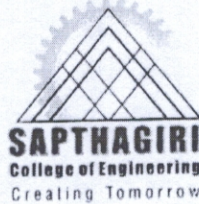Name of the Examiners   Signature with Date

1. Dr. Praveen Kumar L

SAPTHAGIRI COLLEGE OF ENGINEERING

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Bengaluru-560057

Department of Computer Science and Engineering

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SAPTHAGIRI
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Certificate

Certified that the Project Work entitled **"HEALTH MONITORING WITH SMART MEDICINE KIT FOR ELDERLY PEOPLE"** carried out by Arpitha H K (1SG18CS015), Bhoomika S (1SG18CS018), Deepak B K (1SG18CS023), Kiran Kumar H M (1SG19CS403), 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 2021-2022. 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.

Madhushree
25/7/22

Signature of the Guide
Prof. Madhushree
Assistant Professor

25/07/2022

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head

Signature of the Principal
Dr. H Ramkrishna
Principal

EXTERNAL EXAMINATION:

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

Name of the Examiners   Signature with Date

1. Dr. Praveen Kumar

2. Dr. Lavanya N L   28/7/22

SAPTHAGIRI COLLEGE OF ENGINEERING

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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CERTIFICATE

Certified that the Project work entitled **"WILDLIFE MONITORING USING OBJECT DETECTION"** carried out by bonafide students of 8th semester, **Meena Alekhya T(1SG18CS051), Nimisha Nirmal (1SG18CS064), Rohit Rai (1SG18CS089) and Sarika Kashyap (1SG18CS098)**Department of Computer Science & Engineering carried out at college 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 2021-22. It is certified that all corrections/suggestions indicated for Final Assessment have been incorporated in the Report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of **Project work II (18CSP83)** prescribed for the said Degree.

Signature of the Guide
Mrs.Anuradha Badage
Assistant Professor

Signature of the HOD
Dr. KamalakshiNaganna
Professor and Head

Signature of the Principal
Dr. H. Ramakrishna
Principal

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
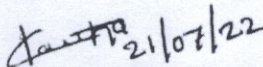Bengaluru - 580 057

EXTERNAL EXAMINATION:

Name of the Examiners   Signature with Date

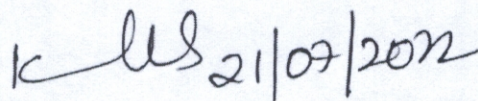Dr. Praveen Kumar K   28/4/22
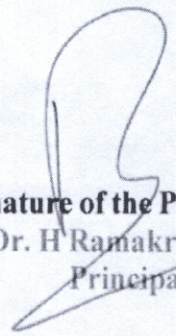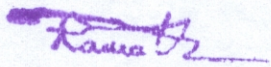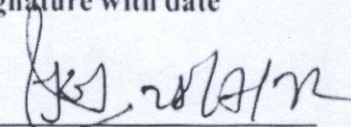
Dr. _____ N.P

CERTIFICATE

Certified that the Project Work entitled "DEVELOPING A PREDICTION MODEL FOR COTTON LEAF DISEASES USING DEEP LEARNING TECHNIQUE" carried out by bonafide students of 8th semester, Apoorva A (1SG18CS014), Fouzia Anjum S (1SG18CS030), Kumari Madhu (1SG18CS039) 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 2021-2022. 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.

21/07/22

Signature of the Guide
Prof. Kavitha B
Assistant Professor

K llS 21/07/2022

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head

Signature of the Principal
Dr. H Ramakrishna
Principal

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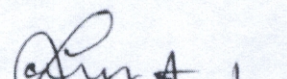14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057

EXTERNAL EXAMINATION

Name of Examiner

Signature with date

1. Dr Praveen kumar KV

28/3/22

2. Dr. Lavanya N.1

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Certified that the Project Work entitled " IOT BASED POWER TRANSMISSION FAULT DETECTION USING BLYNK CLOUD" carried out by ADITYA M(1SG18CS005), BHARGAV TRIMAL KULKARNI (1SG18CS017), DARSHAN K S(1SG18CS021), MANJUNATH RAMA NAIK (1SG18CS048) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of **Bachelor Of Engineering in Computer Science & Engineering** of **Visvesvaraya Technological University, Belagavi** during the academic year 2021-2022. It is certified that all corrections/suggestions indicated for Final 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. Shashi Rekha G

Assistant Professor

Signature of the HOD

Dr. Kamalakshi Naganna

Professor and Head

Signature of the Principal

Dr. H Ramakrishna
Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore- 560 057

EXTERNAL EXAMINATION:

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

Name of the Examiners

Signature with Date

1. Dr. Praveen Kumar V V

2. Dr. Lavanya N L   28/7/22

SAPTHAGIRI COLLEGE OF ENGINEERING

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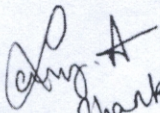#14/5, Chikkasandra, Hesaraghatta Main Road,

Bengaluru-560057

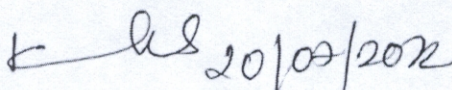## Department of Computer Science and Engineering
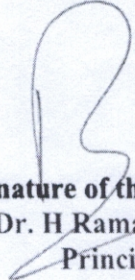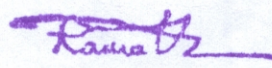
(Accredited by NBA)

SAPTHAGIRI
College of Engineering
Creating Tomorrow

Certificate

Certified that the Project Work entitled **"CRYPTOCURRENCY PRICE PREDICTION"** carried out by NITHIN S M (1SG18CS132), VARUN R (1SG18CS133), NAVEEN S R (1SG18CS061), MANJUNATH M (1SG19CS404), 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 2021-2022. 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. Shankar Rana
Assistant Professor

Signature of the HOD
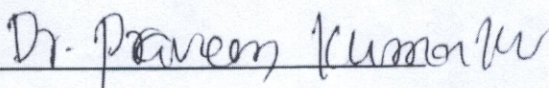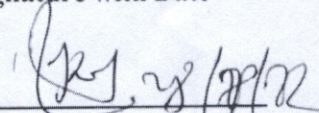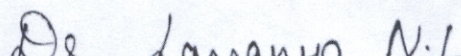Dr.Kamalakshi Naganna
Professor & Head

Signature of the Principal
Dr. H Ramakrishna
Principal

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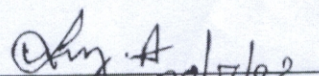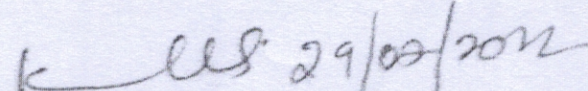14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. Dr. Praveen Kumar M

2. Dr. Lavanya N L

CERTIFICATE

Certified that the Project Work entitled "DISASTER SURVIVAL PREDICTION USING MACHINE LEARNING" carried out by bonafide students of 8th semester, UPMA MAURYA (1SG18CS122), SRISHTI KUMARI(1SG18CS114), SIMRAN MAHTO(1SG18CS108), SABHYATA CHAUDHARY(1SG18CS093), 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 2021-2022. 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	Signature of the HOD	Signature of the Principal
Prof. Shobha.K	Dr. Kamalakshi Naganna	Dr. H Ramakrishna
Assistant Professor	Professor & Head	Principal

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

EXTERNAL EXAMINER

Name of Examiner   Signature with date

1 Dr Kamalakshi Naganna   K lls 29/09/2022

SAPTHAGIRI COLLEGE OF ENGINEERING

Affiliated to VTU, Belagavi, Approved by AICTE, NEW DELHI
(ISO 9001-2015 & ISO14001-2015, Accredited by NAAC with 'A' Grade)
14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru – 560057

DEPARTMENT OF COMPUTER SCIENCE &ENGINEERING

Accredited by NBA

Certificate

Certified that the Project work entitled **"IDENTIFICATION OF DIABETIC RETINOPATHY USING RETINAL IMAGES"** carried out by bonafide students of 8th semester, Siddhant Pandey (1SG18CS107), Shubhashish Pathak (1SG18CS106), Snehal Mishra (1SG18CS111) Department of Computer Science & Engineering carried out at college 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 2021-22. It is certified that all corrections/suggestions indicated for Final Assessment have been incorporated in the Report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work II (18CSP83) prescribed for the said Degree.

22/09/2022

Signature of the Guide	Signature of the HOD	Signature of the Principal
Mrs. Kavitha B	Dr. Kamalakshi Naganna	Dr. H. Ramakrishna
Assistant Professor	Professor and Head	Principal

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

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

EXTERNAL EXAMINATION:

Name of the Examiners   Signature with Date

1: Dr. Kamalakshi Naganna   28/09/2022

2: Chaithra

Department of Computer Science and Engineering

(Accredited by NBA)

Certificate

Certified that the Project Work entitled **"MASQUERADING DETECTION USING MACHINE LEARNING"** carried out by Ankit Raj Mishra (1SG18CS011), Harshit Gupta (1SG18CS033), Priyanshu Kumar (1SG18CS080), Utkarsh Gaurav (1SG18CS123), 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 2021-2022. 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	Signature of the HOD	Signature of the Principal
Prof. Akshatha Kamath	Dr. Kamalakshi Naganna	Dr. H Ramakrishna
Assistant Professor	Professor & Head	Principal

EXTERNAL EXAMINATION:

Name of the Examiners   Signature with Date

1. Dr Praveen Kumar M

2. Dr. Lavanya N.L

SAPTHAGIRI COLLEGE OF ENGINEERING

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Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)

SAPTHAGIRI
College of Engineering

Certificate

Certified that the Project Work entitled **"CUSTOMER CHURN PREDICTION IN TELECOM INDUSTRY"** carried out by Gaurav Gupta (1SG18CS031), Divyanshi Kushwaha (1SG18CS028) 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 2021-2022. 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.

Bhagavati 20/7/22	20/07/2022	
Signature of the Guide	**Signature of the HOD**	**Signature of the Principal**
Mrs. Bhagavati	Dr. Kamalakshi Naganna	Dr. H Ramkrishna
Assistant Professor	Professor & Head	Principal

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

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. Dr. Kamalakshi Naganna   K US 28/07/22

SAPTHAGIRI COLLEGE OF ENGINEERING

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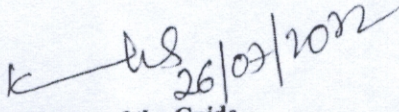ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade
Bengaluru-560057

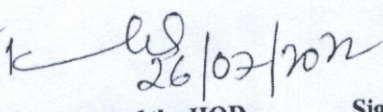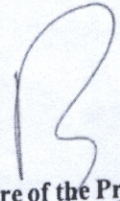# Department of Computer Science and Engineering

(Accredited by NBA)

Certificate

Certified that the Project Work entitled "FOOTPRINT AI ENGINE" carried out by SHAHADAT HUSSAIN (1SG18CS099), VIVEK KUMAR PATEL S (1SG18CS125), PARAMJEET SINGH (1SG18CS070), SAHIL ARYAN (1SG18CS095), 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 2021-2022. 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.

Hemalatha K

Signature of the Guide
Prof. Hemlatha K
Assistant Professor

25/02/2022

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. Kamakakshi Naganna

Signature with Date

28/02/2022

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

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Department of Computer Science and Engineering
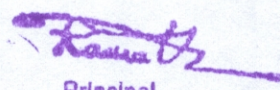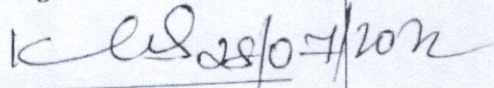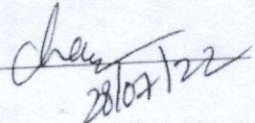
(Accredited by NBA)

Certificate

Certified that the Project Work entitled **"OBSTACLE DETECTION AND HOME APPLIANCES CONTROL USING SMART WHEELCHAIR FOR CRIPPLED PATIENTS"** carried out by **MADHURAVANI N (1SG18CS059), MEGHANA G (1SG18CS054), NAVYASHREE K (1SG18CS062), MEGHA P (1SG18CS052)**, 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 2021-2022. 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.

26/07/2022   26/07/2022

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

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

EXTERNAL EXAMINATION:

Signature with Date

Name of the Examiners

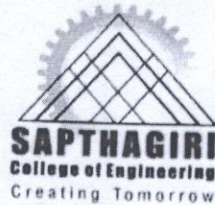1. Dr. Kamalakshi Naganna   25/07/2022

2. Chaithra   28/07/22
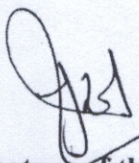
SAPTHAGIRI COLLEGE OF ENGINEERING

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(Accredited By NAAC with "A" Grade)(ISO 9001:2015 & ISO 14001:2015 Certified Institute)
#14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru– 560057

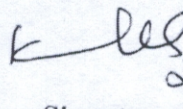### Department Of Computer Science and Engineering
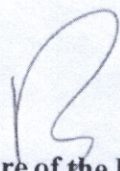(Accredited By NBA)

Certificate

Certified that the Project Work entitled **"INTELLIGENT READER FOR VISUALLY IMPAIRED PEOPLE"** carried out by ANUSHA D B (1SG18CS012), K U ANJALI(1SG18CS037), REVATHI D(1SG18CS084), YASHASWINI S(1SG18CS127) 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 2021-2022. 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 (18CSP85) prescribed for the said degree.

25/7/22

Signature of the Guide
Dr. Praveen Kumar KV
Professor

25/07/2022
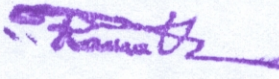
Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head
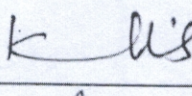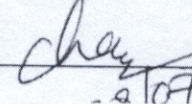
Signature of the Principal
Dr. H Ramakrishna
Principal

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

EXTERNAL EXAMINATION:

Name of the Examiners   **Signature with Date**

1. Dr. Kamalakshi Naganna   28/07/2022

2. Chaithra   2/07/22

SAPTHAGIRI COLLEGE OF ENGINEERING

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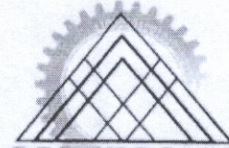ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade
#14/5, Chikkasandra, Hesaraghatta Main Road,
Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)

SAPTHAGIRI
College of Engineering
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Certificate

Certified that the Project Work entitled "DETETCTION AND CLASSIFICATION OF COVID-19/PNEUMONIA WITH CHEST X-RAY IMAGES BY APPLYING AI&ML TECHNIQUES" carried out by ROOPA U (1SG18CS090), RAKSHITHA D (1SG18CS129), DRITHI R (1SG18CS130), 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 2021-2022. 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.

20/09/2022

Signature of the Guide	Signature of the HOD	Signature of the Principal
Dr. Lavanya N L	Dr.Kamalakshi Naganna	Dr. H Ramakrishna
Associate Professor	Professor & Head	Principal

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

EXTERNAL EXAMINATION:

Name of the Examiners   Signature with Date

1. Dr. Kamalakshi Naganna.   25/07/2022

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi.)

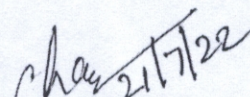ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade

Bengaluru-560057
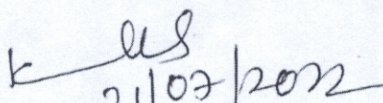
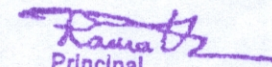# Department of Computer Science and Engineering

(Accredited by NBA)

SAPTHAGIRI
College of Engineering
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Certificate

Certified that the Project Work entitled "HEALTHCARE CHATBOT" carried out by KOUSHIK V UPPULURI (1SG18CS038), LIKITH S (1SG18CS041), M LAKSHMI NAVEEN REDDY (1SG18CS042) and MANU K N (1SG18CS049), 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 2021-2022. 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. Chaithra
Associate Professor

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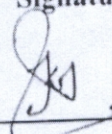
Signature of the Principal
Dr. H Ramakrishna
Principal

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

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. Dr. Praveen Kumar KV   29/7/22
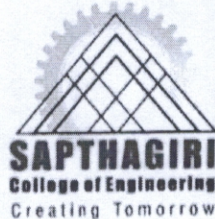
SAPTHAGIRI COLLEGE OF ENGINEERING

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

Department of Computer Science and Engineering

(Accredited By NBA)

SAPTHAGIRI
College of Engineering
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Certificate

Certified that the Project Work entitled **"DIABETES PREDICTION USING ML AND AI ALGORITHMS"** carried out by APARNA SINGH (1SG18CS013), HARSHITHA S (1SG18CS034), JYOTHAPPAGARI VYSHNAVI (1SG18CS036), MADHURI M K (1SG18CS043) 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 2021-2022. 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. Latha A
Assistant Professor

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head

Signature of the Principal
Dr. H Ramakrishna
Principal

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

EXTERNAL EXAMINATION:

Name of the Examiners   Signature with Date

1. Dr. Praveen kumar K V

2. Dr. Lavanua N L

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi.)

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Bengaluru-560057

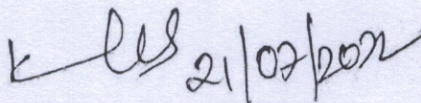# Department of Computer Science and Engineering
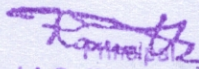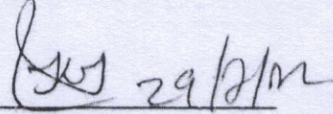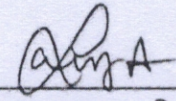
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Creating Tomorrow

Certificate

Certified that the Project Work entitled **"PEST DETECTION AND OBLITERATION BASED ROBOTIC SYSTEM"** carried out by SHIVAKUMAR R E (1SG19CS408), YUVARAJ N R (1SG19CS412), VARSHA H G (1SG19CS409), NEETU RAO D (1SG18CS063), 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 2021-2022. 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.

Madhushree 22/7/22	22/07/2022	
Signature of the Guide	**Signature of the HOD**	**Signature of the Principal**
Prof. Madhushree	Dr. Kamalakshi Naganna	Dr. H Ramkrishna
Assistant Professor	Professor & Head	Principal

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

EXTERNAL EXAMINATION:

Name of the Examiners   Signature with Date

1. Dr. Praveen Kumar   29/7/21

SAPTHAGIRI COLLEGE OF ENGINEERING

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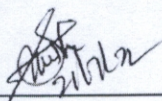ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade
Bengaluru-560057

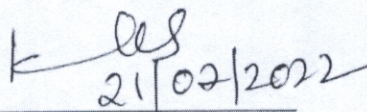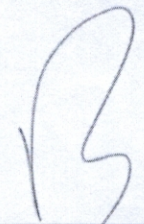# Department of Computer Science andEngineering

(Accredited by NBA)

SAPTHAGIRI
College of Engineering

Certificate

Certified that the Project Work entitled **"Livenessnet and Face Antispoofing System"** carried out by A Y GUNARACHANA(1SG18CS001), BINDU L(1SG18CS020), MONIKA A(1SG18CS057) 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 2021-2022. 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.

21/07/2022

Signature of the Guide
Prof. Anuradha Badage
Assistant Professor

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head

Signature of the Principal
Dr. H Ramakrishna
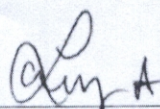Principal

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. Dr. praveen kumareu   29/7/12

2. Dr. Lavanya N.L   29/7/22

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi.)

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Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)

SAPTHAGIRI
College of Engineering

Certificate

Certified that the Project Work entitled **"IDENTIFICATION AND CLASSIFICATION OF BRAIN TUMOR"** carried out by DEEPTHI YADAV G (1SG18CS026), MANISHA L (1SG18CS047), 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 2021-2022. 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.

21/02/2022

Signature of the Guide	**Signature of the HOD**	**Signature of the Principal**
Prof. Swetha B N	Dr. Kamalakshi Naganna	Dr. H Ramakrishna
Assistant Professor	Professor & Head	Principal

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

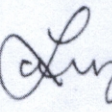**EXTERNAL EXAMINATION:**

Name of the Examiners   Signature with Date

1. Dr. Praveen Kumar K   29/7/22

2. Dr. Lavanya N L   29/7/22

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi.)
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Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)

SAPTHAGIRI
College of Engineering

Certificate

Certified that the Project Work entitled **"AGRO SMART"** carried out by Harshitha J (1SG16CS037), Abdul Haroon Khan (1SG18CS003), Akshatha M (1SG18CS009), Namratha (1SG18CS060), 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 2021-2022. 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.

25/07/202

Signature of the Guide	**Signature of the HOD**	**Signature of the Principal**
Prof. Shashi Rekha G	Dr. Kamalakshi Naganna	Dr. H Ramkrishna
Assistant Professor	Professor & Head	Principal

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

EXTERNAL EXAMINATION:

Name of the Examiners   Signature with Date

1. Dr praveen kumar u   28/7/22

2. Dr. Lavanya N.L   29/7/22

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi.)
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Bengaluru-560057

Department of Computer Science and Engineering
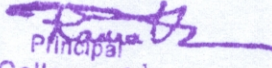
(Accredited by NBA)

Certificate

Certified that the Project Work entitled **"IMAGE BASED SEARCH ENGINE"** carried out by AAKASH WAZA (1SG18CS002), DEVASHISH (1SG18CS027), FARAZ KHAN (1SG18CS029), MOHIT KUMAR SHAW (1SG18CS055), 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 2021-2022. 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	Signature of the HOD	Signature of the Principal
Mr. Shankar Rana	Dr. Kamalakshi Naganna	Dr. H Ramakrishna
Assistant Professor	Professor & Head	Principal

18/07/2022

EXTERNAL EXAMINATION:

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

Name of the Examiners   Signature with Date

1. Dr. Praveen kumar kv   29/7/22

2. Dr. Lavanya N.L   29/7/22

SAPTHAGIRI 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
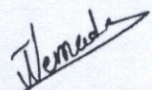
Bengaluru-560057
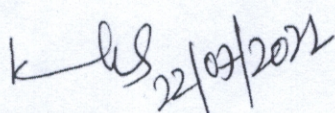
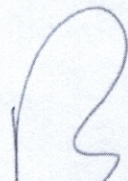# Department of Computer Science and Engineering

(Accredited by NBA)

Certificate

Certified that the Project Work entitled "DIABETIC RETINOPATHY DETECTION USING CNN" carried out by PREETHA S JOIS (1SG18CS075), SUPRIYA K (1SG18CS118), THANUSHREE K J (1SG18CS121), YASHASWINI M KOTEGAR (1SG18CS128), 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 2021-2022. 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. Jayshree N Nemade
Assistant Professor

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head

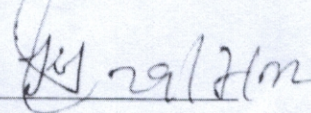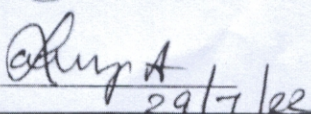**Signature of the Principal**
Dr. H Ramkrishna
Principal

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

EXTERNAL EXAMINATION:

Name of the Examiners   Signature with Date

1. Dr. Praveen Kumar M

2. Dr. Lavanya N. L

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi.)
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Bengaluru-560057

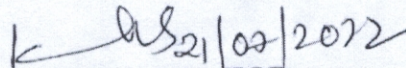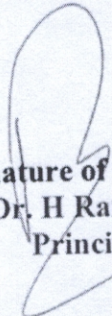# Department of Computer Science and Engineering

(Accredited by NBA)

Certificate

Certified that the Project Work entitled "CHRONIC KIDNEY DISEASE PREDICTION USING MACHINE LEARNING" carried out by Shanu Himkar (1SG18CS101), Nishant Rana (1SG18CS066), 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 2021-2022. 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
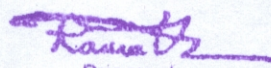Mrs. Shobha K
Assistant Professor

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head

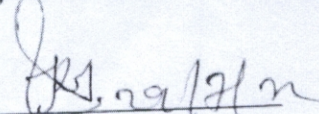**Signature of the Principal**
Dr. H Ramkrishna
Principal

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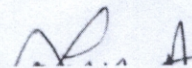Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057

EXTERNAL EXAMINATION:

Signature with Date

Name of the Examiners

1. Dr. Praveen Kumar

SAPTHAGIRI COLLEGE OF ENGINEERING

Affiliated to VTU Belagavi, Approved by AICTE, NEW DELHI

(ISO 9001-2015 & ISO14001-2015 Certified Institute)

Accredited by NAAC with "A" Grade

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru – 560057.

Department of Computer Science & Engineering

Accredited by NBA

CERTIFICATE

Certified that the Project work entitled "**TOOL FOR EVALUATING SUBJECTIVE ANSWERS (TESA)**" carried out by Prerana Shetty (1SG18CS078), Rashmitha P (1SG18CS083), Sonali M (1SG18CS112), Rakshitha M (1SG19CS405), **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 2021-22. It is certified that all corrections/suggestions indicated for Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project Work Phase II(18CSP85) prescribed for the said Degree.

Akshatha Kamath
26/7/22

k hs 26/07/2022

_____   _____   _____
Signature of the Guide   Signature of the HOD   Signature of the Principle

Mrs. Akshstha Kamath   Dr. Kamalakshi Naganna   Dr. H Ramakrishna

Assistant Professor, CS&E   Professor & Head   Principal

EXTERNAL EXAMINATION:

Name of the Examiners   Signature with Date

1. Dr. Kamalakshi Naganna   k lil 29/07/2022

2. Chaithra   cha 29/07/22
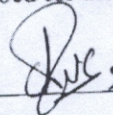
Department of Computer Science and Engineering
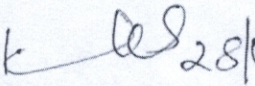
(Accredited by NBA)

Certificate

Certified that the Project Work entitled **"STOCK MARKET PREDICTION USING ML AND SENTIMENTAL ANALYSIS"** carried out by NIRANJAN S (1SG18CS065), S MOHIT (1SG18CS091), SHREYAS V RAO (1SG18CS105), SUPRITH K S (1SG18CS116), 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 2021-2022. 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.

28/07/2022   28/07/2022

Signature of the Guide	**Signature of the HOD**	**Signature of the Principal**
Ms. Chaitra N C	Dr. Kamalakshi Naganna	Dr. H Ramakrishna
Assistant Professor	Professor & Head	Principal

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

EXTERNAL EXAMINATION:

Name of the Examiners   Signature with Date

1. Dr. Kamalakshi Naganna   29/07/2022

2. Chaithra   29/07/22
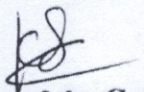
SAPTHAGIRI COLLEGE OF ENGINEERING

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ISO 9001-2015 & ISO14001-2015 Certified, Accredited by NAAC with 'A' Grade
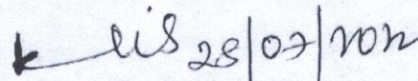Bengaluru – 560057

Department of Computer Science and Engineering
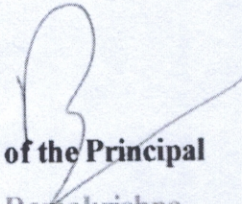(Accredited by NBA)

Certificate

Certified that the Project Work entitled **"FIRE AND GUN VIOLENCE BASED ANOMALY DECTION SYSTEM USING DEEP NEURAL NETWORK"** carried out by ADITYA CHANDRA SINGH (1SG17CS002), SNEH KUMAR RAI (1SG17CS085), SUSHANT (1SG17CS093), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor Of Engineering in Computer Science & Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2021-2022. It is certified that all corrections/suggestions indicated for Final 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.
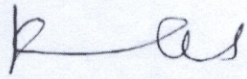
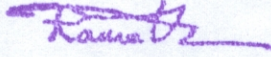**Signature of the Guide**

Prof. SHOBHA K

Assistant Professor

Signature of the HOD

Dr. Kamalakshi Naganna

Professor and Head

Signature of the Principal

Dr. H Ramakrishna

Principal

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

EXTERNAL EXAMINATION:

Name of the Examiners   Signature with Date

1. _____   _____

SAPTHAGIRI 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 **"SIGN LANGUAGE RECOGNITION USING OPENCV"** carried out by PREETHI U (1SG18CS076), SANGEETHA R (1SG18CS097), ANUSHA S (1SG19CS401), VARSHITHA T M (1SG19CS410), 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 2021-2022. 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. Divyamani M K
Assistant Professor

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head

Signature of the Principal
Dr. H Ramkrishna
Principal

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

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. Dr. Kamalakshi Naganna

2. Chaithra

SAPTHAGIRI 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 "REAL TIME POTHOLE DETECTION USING CNN" carried out by ROHAN THAMMAIAH Y C (1SG18CS088), S R PRASHANTH (1SG18CS092), VISHAL SAI R (1SG18CS124), 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 2021-2022. 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.

Bhagavati
28/07/22

Signature of the Guide
Prof. Bhagavati
Assistant Professor

28/07/2022

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head

Signature of the Principal
Dr. H Ramkrishna
Principal

EXTERNAL EXAMINATION:

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

Name of the Examiners

Signature with Date

1. Dr. Kamalakshi Naganna   29/07/202

SAPTHAGIRI 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
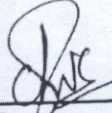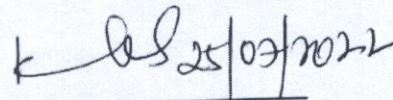
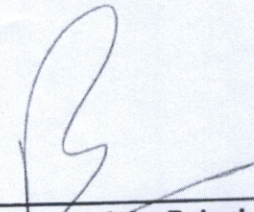# Department of Computer Science and Engineering

(Accredited by NBA)

Certificate

Certified that the Project Work entitled "IMAGE RESTORATION AND UPSCALING USING SWIN TRANSFORMER" carried out by RAKESH S (1SG18CS082), SAGAR K (1SG18CS094), YASHA NIRANJAN (1SG18CS126), 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 2021-2022. 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.

25/07/2022

Signature of the Guide
Ms. Chaitra N C
Assistant Professor

25/07/2022

Signature of the HOD
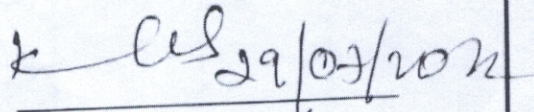Dr. Kamalakshi Naganna
Professor & Head

Signature of the Principal
Dr. H Ramkrishna
Principal

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. Dr. Kamalakshi Naganna

29/07/202

SAPTHAGIRI COLLEGE OF ENGINEERING

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Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)

SAPTHAGIRI
College of Engineering
Creating Tommorow

Certificate

Certified that the Project Work entitled "EMPHASIZED SMART HANDWRITING RECOGNIZER TO FACILITATE e-LEARNING TOOL" carried out by PREETHU T B (1SG18CS077), SRIRAKSHA G (1SG18CS113), SAHANA P (1SG18CS131), SUSHMITHA N (1SG18CS134) , 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 2021-2022. 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
Ms. Hemalatha K
Assistant Professor, CS&E

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

1. Dr Kamalakshi Naganna

2. Chaithra

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Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)

SAPTHAGIRI
College of Engineering

Certificate

Certified that the Project Work entitled **"FOOD CLASSIFICATION USING DEEP LEARNING"** carried out by SIRI M KASHIPATHI (1SG18CS110), SUHAS G C (1SG18CS115), SUPRIYA B TAVANSHI(1SG19CS117), 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 2021-2022. 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.

Hemalatha K   26/07/2022

Signature of the Guide   **Signature of the HOD**   **Signature of the Principal**

Ms. Hemalatha K   Dr. Kamalakshi Naganna   Dr. H Ramkrishna

Assistant Professor, CS&E   Professor & Head   Principal

EXTERNAL EXAMINATION:

Name of the Examiners   Principal   **Signature with Date**

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

1. Dr. Kamalakshi Naganna   29/07/2022

2. Chaithra   29/07/22
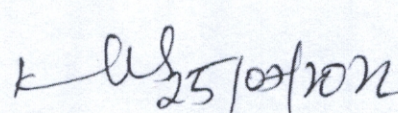
SAPTHAGIRI COLLEGE OF ENGINEERING

Department of Computer Science and Engineering

(Accredited by NBA)

Certificate

Certified that the Project Work entitled **"EMOTION BASED MUSIC PLAYER"** carried out by SHIVANSH(1SG18C103), SHOIB AKHTER(1SG18CS104) 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 2020-2021. 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 (17CSP85) prescribed for the said degree.

Signature of the Guide
Prof. Jayshree N Nemade
Assistant Professor

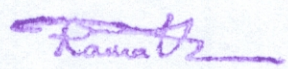**Signature of the HOD**
Dr. Kamalakshi Naganna
Professor & Head

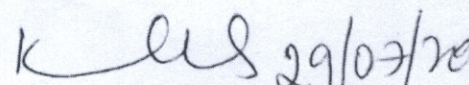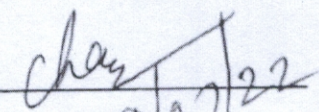**Signature of the Principal**
Dr. H Ramakrishna
Principal

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

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. Dr. Kamalakshi Naganna _____   K US 29/07/20

2. Chaithra _____   chay 29/07/22

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi)
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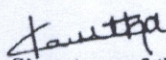Bengaluru – 560057

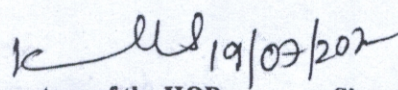# Department of Computer Science and Engineering

(Accredited by NBA)

SAPTHAGIRI
College of Engineering
Creating Tomorrow

Certificate

Certified that the Project Work entitled "**AUTOMATED DOOR SYSTEM INTEGRATED WITH FACEMASK AND ID CARD DETECTION**" carried out by **AMANDEEP SINGH (1SG18CS010), DEEPAK SAH (1SG18CS025), LALIT MUDGAL (1SG18CS040) and MAYANK (1SG18CS050)**, bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor Of Engineering in Computer Science & Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2021-2022. It is certified that all corrections/suggestions indicated for Final 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	**Signature of the HOD**	**Signature of the Principal**
Prof. Kavitha B	Dr. Kamalakshi Naganna	Dr. H Ramakrishna
Assistant Professor	Professor and Head	Principal

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

EXTERNAL EXAMINATION:

Name of the Examiners	Signature with Date
1. Dr. Kamalakshi Naganna	19/09/2022
2. Chaithra	9/9/22

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Bengaluru-560057

Department of Computer Science and Engineering

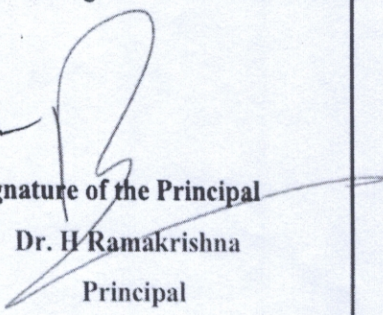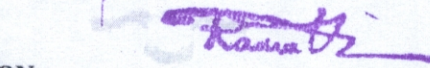(Accredited by NBA)

CERTIFICATE

Certified that the Project Work entitled "Genetic Programming Approach to Detect Hate Speech" carried out by ROHAN KUMAR (1SG18CS087), SAKSHI SHEORAN (1SG18CS096), SIMRAN VERMA (1SG18CS109), 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 2021-2022. 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.
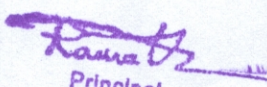
Signature of the Guide	Signature of the HOD	Signature of the Principal
Prof. Swetha B N	Dr. Kamalakshi Naganna	Dr. H Ramakrishna
Assistant Professor	Professor & Head	Principal

EXTERNAL EXAMINATION:

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

Name of the Examiners   Signature with Date

1. DD Praveen kumar pv

SAPTHAGIRI COLLEGE OF ENGINEERING

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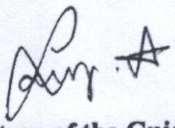ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade
Bengaluru-560057

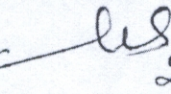# Department of Computer Science and Engineering

(Accredited by NBA)

Certificate

Certified that the Project Work entitled " Face detection and monitoring in multiple surveillance footage using convolutional neural network (CNN)" carried out by ADITYA SHARMA R (1SG18CS006), ARUNA KUMAR (1SG18CS016), HARSH P KAVATEKAR (1SG18CS032), 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 2021-2022. 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.

25/07/2022

Signature of the Guide	Signature of the HOD	Signature of the Principal
Dr. Lavanya N L	Dr. Kamalakshi Naganna	Dr. H Ramkrishna
Associate professor	Professor & Head	Principal

EXTERNAL EXAMINATION:

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

Name of the Examiners   Signature with Date

1. Dr praveen kumar ku   30/7/22

2. Dr. Lavanya N.L   30/7/22

Department of Computer Science and Engineering

Certificate

Certified that the Project Work entitled "AUTOMATIC VIBRATION DEVICE FOR STROKE PATIENT "carried out by BHAVYA K H(1SG15CS016), MANO R(1SG16CS408) , VAISHNAVI KASHYAP J(1SG17CS097) 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 2021-2022. 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 (15CSP85)prescribed for the said degree.

28/07/2022

Signature of the Guide
Prof.Divyamani M K
Assistant Professor

29/07/2022

Signature of the HOD (IC)
Dr. KamalakshiNaganna
Professor& Head

Signature of the Principal
Dr. H Ramkrishna
Principal

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

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. Dr. Praveen Kumar

30/07/22

2. Dr. Lavanya M.L

30/7/22

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Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)

Certificate

Certified that the Project Work entitled "PRETERM BIRTH RISK DETECTION SYSTEM" carried out by PRATHIK N (1SG18CS074), R GOVARDHANA (1SG18CS081), SHERWIN E (1SG18CS102), 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 2021-2022. 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. Divyamani M K
Assistant Professor

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head

Signature of the Principal
Dr. H Ramkrishna
Principal

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

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

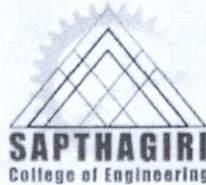1. Dr. Praveen Kumar   30/7/22

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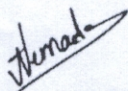Bengaluru-560057

Department of Computer Science and Engineering
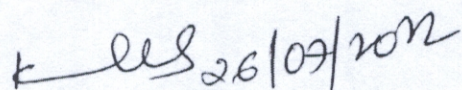
(Accredited by NBA)

Certificate

Certified that the Project Work entitled **"Crop And Yield Prediction With Estimation"** carried out by **SOWMYA SUBRAHMANYAM (1SG14CS129),** bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineeringin Computer Science and EngineeringofVisvesvaraya Technological University, Belagaviduring the academic year 2021-2022. 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 (10CS86)prescribed for the said degree.

26/09/2022

Signature of the Guide
Prof. Jayshree Nikhil Nemade
Assistant Professor

Signature of the HOD
Dr.Kamalakshi Naganna
Professor & Head

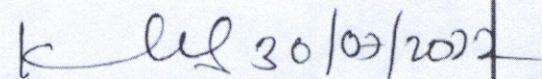**Signature of the Principal**
Dr. H.Ramkrishna
Principal

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

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. Dr.Kamalakshi Naganna

30/09/2022

2. Chaithra