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SAPTHAGIRI COLLEGE ENGINEERING

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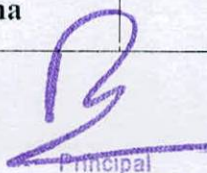#14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru– 560 057.

Department of Computer Science & Engineering
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Academic Year: 2022- 2023

Project Batches with Title 2022-2023

Sl No.	USN	Student Name	Guide Name	Title of the project
1	1SG19CS057	Mandhara B G	Dr.Kamalakshi Naganna	Intelligent System for intrusion of animals using convolutional neural network and IOT
	1SG19CS020	Chandrala P Deshpande		
	1SG19CS027	Deepthi B S		
	1SG19CS061	Megha Arun Talekar		
2	1SG19CS116	Umesh RG	Dr.Praveen Kumar	Radio resource allocation for 5G network using deep reinforcement learning
	1SG19CS112	Sushil kumar G N		
	1SG19CS094	Santhosh K		
	1SG19CS111	Suraksha M S		
3	1SG19CS069	Neetu Vijayananda	Dr Lavanya N L	Abnormal Event Detection And Signalling In Multiple Video Surveillance Scenes Using Convolutional Neural Network (CNN)
	1SG19CS070	Nidhi N Sattigeri		
	1SG19CS071	Nisarga R K		
	1SG19CS073	Pooja N M		
4	1SG19CS123	Vishal R	Prof.Bhanu Jyothi H C	Implementing virtual dressing room using deep neural network
	1SG19CS077	Praneet V K		
	1SG19CS119	Varun S Raju		
	1SG19CS113	Suvidha Manjunath Naik		
5	1SG19CS053	Likith Gowda A P	Prof.Sheela Rani C M	Medicine Vending machine using image processing.
	1SG20CS400	Amulya S K		
	1SG20CS402	Anusha M L		
	1SG20CS403	Bharath G		
6	1SG20CS401	Annapurna Kini	Prof .Lavanya K	Rainfall prediction using various ML algorithms.
	1SG20CS406	Harshitha M H		
	1SG19CS019	Chandana G		
	1SG20CS408	Nandini N		
7	1SG19CS124	Yeshaswini N	Prof.Roopa Banakar	Real time sign language recognition system for hearing and speech impaired people
	1SG19CS090	Sanchana HT		
	1SG19CS120	Vidhya krishna		

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	1SG19CS115	Thejashree P		impared using computer vision and deep learning
8	1SG19CS117	Vaishnavi Vijay Kulkarni	Prof.Shwetha AB	Android obfuscated malware application detection using machine learning techniques.
	1SG19CS063	Monish V		
	1SG19CS083	Rakshith BS		
9	1SG19CS056	Manasa R	Prof.Bhanu Jyothi H C	Design and developing autonomous car using deep reinforcement learning.
	1SG19CS058	Manjesh B N		
	1SG19CS091	Sanchitha K		
	1SG19CS121	Vidhyashree S		
10	1SG19CS024	Deekshith B V	Prof. Vanitha G P	Secure decentralised vehicle sharing system using blockchain
	1SG19CS031	Harsha H J		
	1SG19CS036	Hitesh B S		
	1SG19CS038	Jayanth N		
11	1SG19CS075	Prabhakar b K	Prof.Sheela Rani C M	Computer vision based traffic prediction and violation control.
	1SG19CS107	Srishti suman		
	1SG19CS050	KSHITIJ KUMAR		
	1SG19CS005	AMAN KUMAR		
12	1SG19CS013	Arham Saba	Prof.Roopa Banakar	Analysing cryptocurrency pump and dump scams through social media.
	1SG19CS078	Pranshu Priyam		
	1SG19CS100	Shreyasi Patra		
	1SG19CS104	Soumya		
13	1SG19CS008	Anjali G S	Prof. Poornima G J	Forensic Evidence management using blockchain technology
	1SG19CS039	Jyothi B		
	1SG19CS046	Kavya P		
	1SG19CS049	Kokila N		
14	1SG19CS026	Deepak Raj	Prof .Rakesh Kalshetty	Encoding Binary Data within a Digital image using Deep Steganography and Multilayered Neural Network
	1SG19CS009	Ankur Kumar		
	1SG19CS011	Anurag Singh		
	1SG19CS109	Subhanshu Jha		
15	1SG19CS007	Anish Bhat	Dr.Lavanya N L	Explore the Sky: Face Tracking and object detection for RPAS
	1SG19CS015	Bhanuranjan S Bellakki		
	1SG19CS040	K G Lakshmi Narayan		
	1SG19CS059	Manjunath Bharadwaj V		
16	1SG19CS016	Bhavya Vaishnavi	Prof.Divyamani	Visual question and

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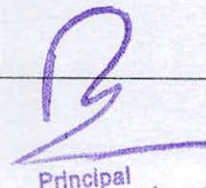(ISO 9001-2015 & 14001-2015 Certified)
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	1SG19CS041	K N Bhavya		answering using deep learning
	1SG19CS042	Kajal Dahiya		
	1SG19CS043	Kamineni Pravalika		
17	1SG19CS028	Dhanya M Shetty	Prof. Kruthi C	Spotting pathogens on the plant leaf and furnishing remedies using CNN algorithm.
	1SG19CS034	Harshitha S		
	1SG19CS030	Etukulapati Meghana		
	1SG19CS037	Iifa Sharif		
18	1SG19CS029	Diksha Bhardwaj	Prof. Hemalatha K	Spam account predictor using Machine Learning
	1SG19CS047	Keshav Chandra Ray		
	1SG19CS051	Kumar Swapnil		
	1SG19CS055	Manas Mishra		
19	1SG19CS002	Abhijith Yadav.L	Prof.Vanitha G P	Accident detection and avoidance using IOT
	1SG19CS018	Chandan.V.M		
	1SG19CS052	Lavanya.C		
	SG19CS035	Harshitha.V		
20	1SG19CS017	Bhumika M	Prof .Madhushree	IOT and ML approach in Hydroponic System
	1SG19CS022	Chethana R		
	1SG19CS023	Chithra P		
	1SG19CS032	Harshini G		
21	1SG19CS087	Sahana Gajanan Naik	Prof. Poornima G J	Freshness Of Food Detection Using Iot Machine And ML
	1SG19CS103	Sneha N		
	1SG19CS033	Harshitha S		
	1SG19CS085	Rithvik Prashanth		
22	1SG19CS068	Nayanika Sur	Prof.Kruthi T C	IOT based smart cradle for baby monitoring system.
	1SG19CS114	Thejashree B P		
	1SG20CS410	Preetham P		
	1SG20CS411	Suchith K		
23	1SG20CS407	Lohith K	Prof.Anuradha B	Health monitoring system using IOT
	1SG20CS409	Prashanth B S		
	1SG19CS074	Poojitha G		
24	1SG19CS066	Navdeep	Prof. Madhushree	ML and MLP to evaluate Subjective scripts
	1SG19CS082	Rajat Yadav		
	1SG19CS081	Rahul kumar		
	1SG19CS072	Padmini Sharma		
25	1SG19CS095	Shejal Singh	Prof.Hemalatha K	IOT based traffic management system for
	1SG19CS060	Mayank Raj		

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	1SG19CS080	Priyesh Raj		emergency vechiles
	1SG19CS010	Anubhaw Anand		
26	1SG19CS001	Abhay Smaran Halemane	Prof.Anuradha B	Robotic soldier assistance vehicle.
	1SG19CS004	Adharsh Bhanu Sharma BS		
	1SG19CS054	Likith Krishna SG		
	1SG19CS045	K.Karthik		
27	1SG19CS088	Sahitya Modi	Prof.Shashi Rekha G	Deep fake creation and identification using deep learning.
	1SG19CS084	Rakshith K P		
	1SG19CS012	Anusha D V		
	1SG19CS064	Muskan		
28	1SG19CS089	Sambram Shetty	Dr.Kamalakshi Naganna	Dconnect-Decentralized social media application
	1SG19CS092	Sandhya S		
	1SG19CS105	Sriram Mishra H K		
	1SG19CS106	Srisha Nag C S		
29	1SG19CS086	ROHITH S	Prof .Shashi Rekha G	Solar DRIVE-IN electric vehicle charging HUB
	1SG19CS093	SANJANA PATIL		
	1SG19CS108	SRUSHTI KS		
	1SG19CS122	VINUTHA DS		
30	1SG19CS099	SHOURYA RANJAN	Prof .Divyamani M K	Smart electoral voting system using face recognition
	1SG19CS101	SHUBHAM RAJ		
	1SG19CS118	VANSHAJ RAJ		
	1SG19CS044	KARAN RAJ		
31	1SG19CS097	SHIV PRASAD	Prof. Rakesh Kalshetty	Automatic pet feeder using IOT
	1SG19CS110	SUNIL A		
	1SG19CS076	PRAMOD		
	1SG19CS062	MONISH KUMAR P		
32	1SG19CS125	YASHRAJ GUPTA	Dr. Praveen Kumar	Deblur: Removing mild blur using Deep learning.
	1SG19CS126	SAJAD AHMAD		
	1SG19CS098	SHIVANI KUMARI		
	1SG17CS050	MD WAJAHAT RAZA		
33	ISG19CS006	AMOGHA NATEKAR J	Prof Shwetha AB	A Real-time fire detection using deep convolutional neural networks andlong short term memory in video surveillance
	ISG19CS025	DEKSHITH G D		
	1SG19CS021	CHARAN S		
	1SG19CS003	ABHILASH S		

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34	1SG18CS019	BHUVAN GOWDA BS	Prof. Kruthi T C	Automated greenhouse and field cultivation monitoring system using IOT
	1SG18CS022	DARSHAN S		
	1SG18CS058	MUDEGOWDAR VINAY		
	1SG18CS071	PRAJWAL P		
35	1SG19CS065	N VENU MAADHAV	Prof.Lavanya K	Electricity theft detection using machine learning
	1SG19CS014	ASHISH SINGH		
	1SG19CS048	KISHORE JAKKALI		
	1SG19CS096	SHEKHAR		

Signature of Coordinators

Signature of HOD

Professor & Head of the Department
Computer Science Engineering
Sapthagiri College of Engineering
Bangalore - 57

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

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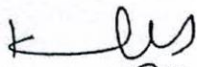
Department of Computer Science and Engineering

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Certificate

Certified that the Project Work entitled "Intelligent System for Intrusion of Animals using Convolutional Neural Network and Internet of Things" carried out by Mandhara B G (1SG19CS057), Chandrala P Deshpande (1SG19CS020), Megha Arun Talekar(1SG19CS061), Deepthi B S (1SG19CS027), 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 2022-2023. 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
22/05/2023
Dr. Kamalakshi Naganna
Professor & Head

Signature of the HOD
22/05/2023
Dr. Kamalakshi Naganna
Professor & Head

Signature of the Principal
Dr. H Ramkrishna
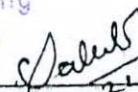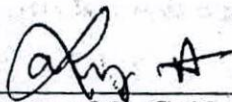Principal

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

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

1. Mrs. Savita. B. Patil   22/5/23

2. Madhushree   22/5/23
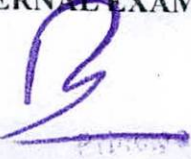
Department of Computer Science and Engineering

(Accredited by NBA)

Certificate

Certified that the Project Work entitled "RADIO RESOURCE ALLOCATION FOR 5G NETWORK USING DEEP REINFORCEMENT LEARNING" carried out by SANTHOSH K (1SG19CS094), SUSHIL KUMAR G N (1SG19CS112), UMESH R G (1SG19CS116), SURAKSHA M S (1SG19CS111), 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 2022-2023. 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**
Dr. Praveen Kumar K V	Dr. Kamalakshi Naganna	Dr. H Ramakrishna
Professor	Professor & Head	Principal

EXTERNAL EXAMINATION:

Name of the Examiners   Signature with Date

1. Madhushree   22/5/23

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

2. Mrs. Savita B. Pahl

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Department of Computer Science and Engineering

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SAPTHAGIRI
College of Engineering

Certificate

Certified that the Project Work entitled "ABNORMAL EVENT DETECTION AND SIGNALLING IN MULTIPLE VIDEO SURVEILLANCE SCENES USING CONVOLUTIONAL NEURAL NETWORK(CNN)" carried out by NEETU VIJAYANANDA (1SG19CS069), NIDHI N SATTIGERI (1SG19CS070), NISARGA R R (1SG19CS071), POOJA N M (1SG19CS073) 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 2022-2023. 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. Lavanya N L
Associate 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

1. Madhushre

Madhushre 22/5/23

Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road

2. Mrs. Savita B Patil Bangalore-560 057

22/5/23

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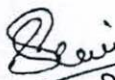ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade
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College of Engineering

Certificate

Certified that the Project Work entitled "Implementing Virtual Dressing Room using DNN" carried out by VISHAL R (1SG19CS123), PRANEET V K (1SG19CS077), SUVIDHA MANJUNATH NAIK (1SG19CS113), VARUN S RAJU (1SG19CS119), 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 2022-2023. 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
Bhanujyothi H C
Assistant Professor

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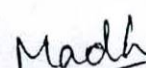
Signature of the Principal
Dr. H Ramakrishna
Principal

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. Madhushree

Madhushree 22/5/23

2. MrS Savita B Patil

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

Savit 22/5/23

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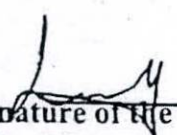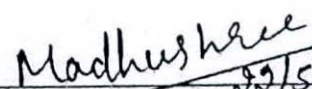# SAPTHAGIRI COLLEGE OF ENGINEERING

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Certificate

Certified that the Project Work entitled "MEDICINE VENDING MACHINE USING IMAGE PROCESSING" carried out by LIKITH GOWDA A P (1SG19CS053), AMULYA S K (1SG20CS400), ANUSHA M L (1SG20CS402), BHARATH G (1SG20CS403), 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 2022-2023. 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 .Sheela rani C M	Dr. Kamalakshi Naganna	Dr. H Ramkrishna
Assistant Professor	Professor & Head	Principal

EXTERNAL EXAMINATION:

Name of the Examiners   Signature with Date

1. Madhushru

2. Mrs. Sanita. B. Pat

Principal
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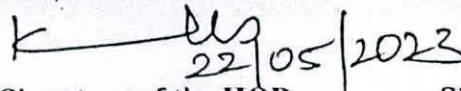**Bengaluru-560057**

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Certified that the Project Work entitled "RAINFALL PREDICTION USING VARIOUS M L ALGORITHMS" carried out by CHANDANA G (1SG19CS019), ANNAPURNA KINI (1SG20CS401), HARSHITHA M H (1SG20CS406), NANDINI N(1SG20CS408), 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 2022-2023. 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.

22/05/2022

Signature of the Guide
Prof. Lavanya K
Assistant Professor

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

22/5

Signature of the Principal
Dr. H Ramkrishna
Principal

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. Madhushree

Madhushree 22/5/23

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
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2. Mrs. Savita. B-Pati

22/5/23

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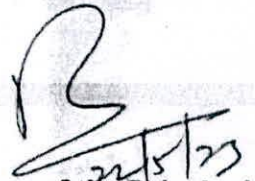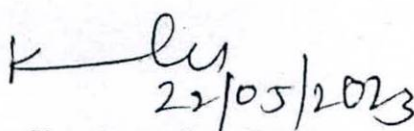# Department of Computer Science and Engineering

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Certificate

Certified that the Project Work entitled "REAL-TIME SIGN LANGUAGE RECOGNITION SYSTEM FOR HEARING AND SPEECH IMPAIRED PEOPLE" carried out by SANCHANA H T (1SG19CS090), YASHASWINI N (1SG19CS124), VIDHYA KRISHNA (1SG19CS120), THEJASHREE P (1SG19CS115) 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 2022-2023. 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.

22/05/2023

Signature of the Guide
Prof. Roopa Banakar
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

1. Madhushree

2. Mrs. Savita B. Patil

Signature with Date

Madhushree 22/5/23
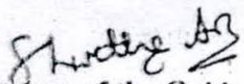
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Bangalore- 560 057

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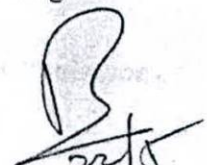# Department of Computer Science and Engineering

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Certificate

Certified that the Project Work entitled "Android Obfuscated Malware Application Detection Using Machine Learning Techniques" carried out by Monish V (1SG19CS063), Rakshith BS (1SG19CS083), Vaishnavi V Kulkarni (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 2022-2023. 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. Shwetha AB	Dr. Kamalakshi Naganna	Dr. H Ramakrishna
Assistant Professor	Professor & Head	Principal

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. Madhushree

Madhushree 22/5/23

2. Mrs. Savita. B. Pati

22/5/23

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

⑧

SAPTHAGIRI COLLEGE OF ENGINEERING

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Bengaluru-560057

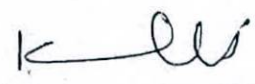## Department of Computer Science and Engineering

(Accredited by NBA)

SAPTHAGIRI
College of Engineering

Certificate

Certified that the Project Work entitled "Design and Developing Autonomous Car Using Deep Reinforcement Learning Techniques" carried out by MANASA R (1SG19CS056), MANJESH B N (1SG19CS058), SANCHITHA K (1SG19CS091), VIDYASHREE S (1SG19CS121), 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 2022-2023. 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
Bhanujyothi H C
Assistant Professor

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head

Signature of the Principal
Dr. H Ramkrishna
Principal **Principal**
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road.
Bangalore-560 057

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. Madhushree

Madhushree 22/5/23

2. Mrs. Savita. B-Pati

Chikkasandra, Hesaraghatta Road
Bangalore- 560 057

SAPTHAGIRI COLLEGE OF ENGINEERING

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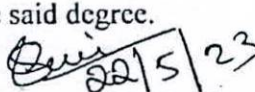ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade
Bengaluru-560057

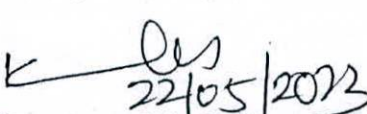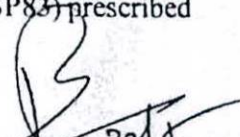# Department of Computer Science and Engineering

(Accredited by NBA)

Certificate

Certified that the Project Work entitled "SECURE DECENTARLIZED VEHICLE SHARING SYSTEM USING BLOCKCHAIN" carried out by DEEKSHITH B V (1SG19CS024), HARSHA H J (1SG19CS031), HITESH B S (1SG19CS036), JAYANTH N (1SG19CS038), 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 2022-2023. 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. Vanitha G P
Assistant Professor

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head

Signature of the Principal
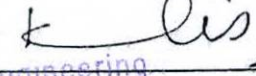Dr. H Ramkrishna
Principal

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. CHAITRA B DB ST

2. Dr. Kamalakshi Naganna   23/05/2023

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 "COMPUTER VISION BASED TRAFFIC PREDICTION AND VIOLATION CONTROL" carried out by AMAN KUMAR (1SG19CS005), KSHITIJ KUMAR (1SG19CS050), PRABHAKAR B K (1SG19CS075), SRISHTI SUMAN (1SG19CS107), 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 2022-2023. 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
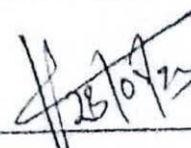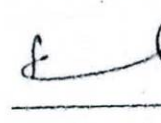Dr. H Ramkrishna
Principal

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. CHAITRA·B, DBIT

2. Dr. Kamalakshi Naganna   23/05/2023

SAPTHAGIRI COLLEGE OF ENGINEERING

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Bengaluru-560057

Department of Computer Science and Engineering

(Accredited by NBA)

Certificate

Certified that the Project Work entitled "ANALYSING CRYPTOCURRENCY PUMP AND DUMP SCAMS THROUGH SOCIAL MEDIA" carried out by ARHAM SABA (1SG19CS013), PRANSHU PRIYAM (1SG19CS078), SHREYASI PATRA (1SG19CS100), SOUMYA (1SG19CS104), bonafide students of Sapthagiri College of Engineering Visvesvaraya Technological University, Belagavi during the academic year 2022-2023. 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.

23/5/23

Signature of the Guide	Signature of the HOD	Signature of the Principal
Prof. Roopa Banakar	Dr. Kamalakshi Naganna	Dr. H Ramkrishna
Assistant Professor	Professor & Head	Principal

EXTERNAL EXAMINATION:

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

Name of the Examiners   Signature with Date

1. CHAITRA B, DBIT

2. Dr. Kamalakshi Naganna   23/05/2022

SAPTHAGIRI COLLEGE OF ENGINEERING

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

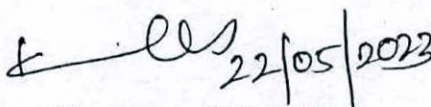# Department of Computer Science and Engineering
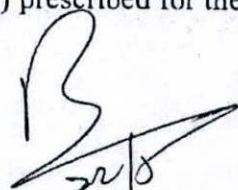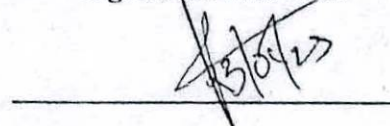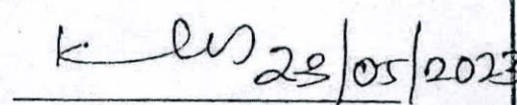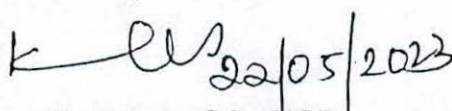
(Accredited by NBA)

Certificate

Certified that the Project Work entitled "FORENSIC EVIDENCE MANAGEMENT USING BLOCKCHAIN TECHNOLOGY" carried out by ANJALI G S (1SG19CS008), JYOTHI B (1SG19CS039), KAVYA P (1SG19CS046), KOKILA N (1SG19CS049), 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 2022-2023. 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 Poornima G J Assistant Professor	**Signature of the HOD** Dr. Kamalakshi Naganna Professor & Head	**Signature of the Principal** Dr. H Ramkrishna Principal

EXTERNAL EXAMINATION:

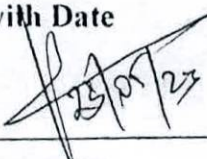**Name of the Examiners**   **Signature with Date**

1. CHAITRA B, DBIT

2. Dr. Kamalakshi Naganna   28/05/2023

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

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 "ENCODING BINARY DATA WITHIN A DIGITAL IMAGE USING DEEP STEGANOGRAPY AND MULTILAYERED NEURAL NETWORK" carried out by ANURAG SINGH (1SG19CS011),DEEPAK RAJ (1SG19CS026), ANKUR KUMAR (1SG19CS009), SUBHANSHU JHA (1SG19CS109), 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 2022-2023. 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. Rakesh Kalshetty
Assistant Professor

Signature of the HOD 22/05/2023
Dr. Kamalakshi Naganna
Professor & Head

Signature of the Principal
Dr. H Ramkrishna
Principal

EXTERNAL EXAMINATION:

Name of the Examiners	Signature with Date
1. CHAITRA-B, DBIT	
2. Dr. Kamalakshi Naganna	23/05/2023

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

SAPTHAGIRI COLLEGE OF ENGINEERING

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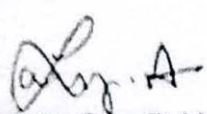Bengaluru-560057

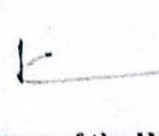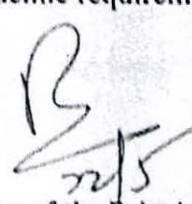# Department of Computer Science and Engineering

(Accredited by NBA)

Certificate

Certified that the Project Work entitled "EXPLORE THE SKY: FACE TRACKING AND OBJECT DETECTION FOR RPAS" carried out by ANISH BHAT (1SG19CS007), BHANURANJAN S BELLAKKI (1SG19CS015), LAKSHMI NARAYAN (1SG19CS040), MANJUNATH BHARADHWAJ V (1SG19CS059), 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 2022-2023. 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. Lavanya N.L
Associate 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

1. CUATTRA-S DBT

2. Dr. Kamalakshi Naganna

23/05/20.3

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
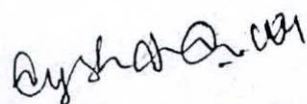Bengaluru-560057

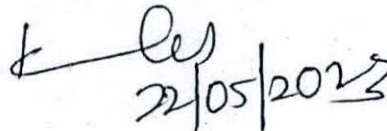# Department of Computer Science and Engineering
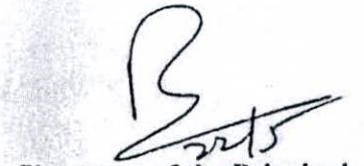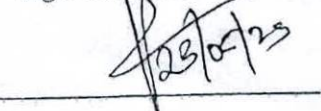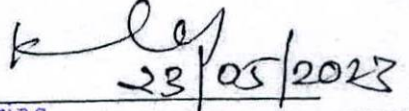
(Accredited by NBA)

Certificate

Certified that the Project Work entitled "VISUAL QUESTION AND ANSWERING USING DEEP LEARNING" carried out by BHAVYA VAISHNAVI (1SG19CS016), K N BHAVYA (1SG19CS041), KAJAL DAHIYA (1SG19CS042), KAMINENI PRAVALIKA (1SG19CS043), 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 2022-2023. 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. Vyshnavi M	Dr. Kamalakshi Naganna	Dr. H Ramkrishna
Assistant Professor	Professor & Head	Principal

EXTERNAL EXAMINATION:
Name of the Examiners

Signature with Date

1. CHAITRA.B, DBIT

2. Dr. Kamalakshi Naganna   23/05/2023

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

SAPTHAGIRI COLLEGE OF ENGINEERING

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Bengaluru-560057

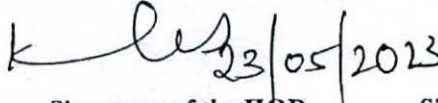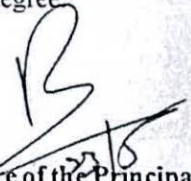# Department of Computer Science and Engineering

(Accredited by NBA)

SAPTHAGIRI
College of Engineering

Certificate

Certified that the Project Work entitled "SPOTTING PATHOGENS ON THE PLANT LEAF AND FURNISHING REMIDIES USING CNN" carried out by DHANYA M SHETTY (1SG19CS028), ETUKULAPATI MEGHANA (1SG19CS030), HARSHITHA S (1SG19CS034), IIFA SHARIF (1SG19CSO37), 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 2022-2023. 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.

Kruth·T·C

Signature of the Guide
Prof. Kruthi T C
Assistant Professor

23/05/2023

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head

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

EXTERNAL EXAMINATION:

Name of the Examiners

Principal
Sapthagiri College of Engineering **Signature with Date**
Chikkasandra, Hesaraghatta Road
Bangalore- 560 057

1. CHAITRA·P, DBIT

2. Dr. Kamalakshi Naganna

23/05/23

23/05/2023

(19)

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 "SPAM ACCOUNT PREDICTOR USING MACHINE LEARNING" carried out by Diksha Bhardwaj (1SG19CS029), Keshav Chandra Ray (1SG19CS047), Kumar Swapnil (1SG19CS051), Manas Mishra (1SG19CS055), 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 2022-2023. 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. Hemalatha K
Assistant Professor

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head

Signature of the Principal
Dr. H Ramkrishna
Principal
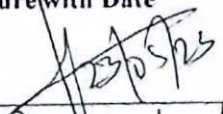
EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. CHAITRA B DBIT

2. Dr. Kamalakshi Naganna

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

23/05/2023

SAPTHAGIRI COLLEGE OF ENGINEERING

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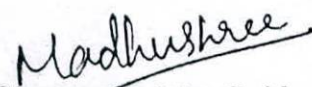ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade
Bengaluru-560057

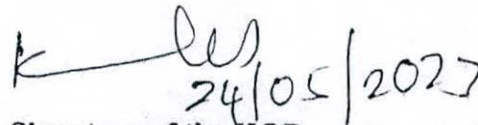## Department of Computer Science and Engineering
(Accredited by NBA)

Certificate

Certified that the Project Work entitled "ACCIDENT DETECTION AND AVOIDANCE USING IOT" carried out by **ABHIJITH YADAV L (1SG19CS002)**, **CHANDAN V M (1SG19CS018)**, **HARSHITHA V (1SG19CS035)**, **LAVANYA C (1SG19CS052)**, 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 2022-2023. 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.

23/05/2023   23/5/23

Signature of the Guide   **Signature of the HOD**   **Signature of the Principal**
Vanitha G P   Dr. Kamalakshi Naganna   Dr. H Ramkrishna
Assistant Professor   Professor & Head   Principal

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

EXTERNAL EXAMINATION:

Name of the Examiners   **Signature with Date**

1. Dr. praveen Kumar M   24/5/23

2. Shruthi. 8.   24/5/23

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

SAPTHAGIRI COLLEGE OF ENGINEERING

Department of Computer Science and Engineering

(Accredited by NBA)
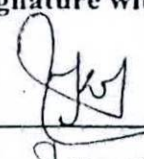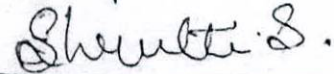
SAPTHAGIRI
College of Engineering

Certificate

Certified that the Project Work entitled "IoT and Machine Learning Approach in Hydroponic System" carried out by BHUMIKA M (1SG19CS017), CHETHANA R KARIGER (1SG19CS022), CHITHRA P (1SG19CS023), HARSHINI GIRISH MITRA (1SG19CS032) 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 2022-2023. 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.

24/05/2023

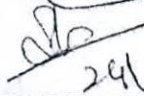**Signature of the Guide**
Prof. Madhushree
Assistant Professor

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head

Signature of the Principal
Dr.H Ramakrishna
Principal

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

1. Dr. Praveen Kumar   24/5/23

2. Shrutti.S.   24/5/23

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

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 "Freshness Of Food Detection Using IOT And Machine Learning" carried out by Harshitha S (1SG19CS033), Rithvik Prashanth (1SG19CS085), Sahana Gajanan Naik (1SG19CS087), Sneha N (1SG19CS103), 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 2022-2023. 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.Poornima GJ
Assistant Professor

Signature of the HOD 23/05/2023
Dr. Kamalakshi Naganna
Professor & Head dept

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

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. Dr. Pravan Kumar 1   .24/5/2

2. Shruthi S.   Principal   84 24/5/23.
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore- 560 057

(29)

SAPTHAGIRI COLLEGE OF ENGINEERING

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Bengaluru-560057

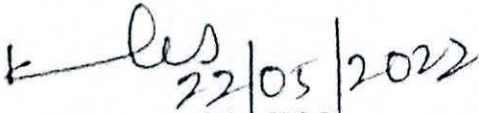# Department of Computer Science and Engineering

(Accredited by NBA)

Certificate

Certified that the Project Work entitled "IOT BASED SMART CRADLE FOR BABY MONITORING SYSTEM" carried out by THEJASHREE B P (1SG19CS114), PREETHAM P (1SG20CS410), SUCHITH K (1SG20CS411) NAYANIKA SUR (1SG19CS068) 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 2022- 2023. 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 asit satisfies the academic requirements in respect of **Project Work Phase II** (18CSP83) prescribed for the said degree.

Kruth. T.C   23|05|2023

Signature of the Guide   **Signature of the HOD**   **Signature of the Principal**
Prof. Kruthi T C   Dr. Kamalakshi Naganna   Dr. H Ramakrishna
Assistant Professor   Professor & Head   Principal
                                                      Sapthagiri College of Engineering
                                                      Chikkasandra, Hesaraghatla Road
                                                      Bangalore- 560 057

EXTERNAL EXAMINATION:

Name of the Examiners   **Signature with Date**

1. Dr praveen kumar BV   24|05|

                                      Principal

2. Shruthi S   Sapthagiri College of Engineering   24|05|23
                       Chikkasandra, Hesaraghatta Road

SAPTHAGIRI COLLEGE OF ENGINEERING

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Bengaluru-560057

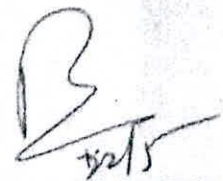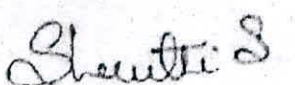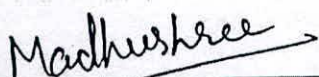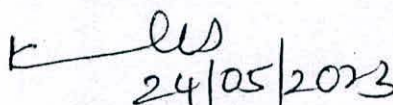# Department of Computer Science and Engineering

(Accredited by NBA)

Certificate

Certified that the Project Work entitled "HEALTH MONITORING SYSTEM USING IOT" carried out by POOJITHA G (1SG19CS074), LOHITH K (1SG20CS407), PRASHANTH B S (1SG20CS409), 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 2022-2023. 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
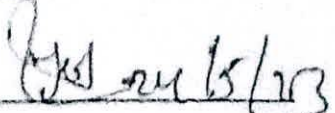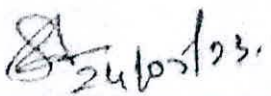
Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head
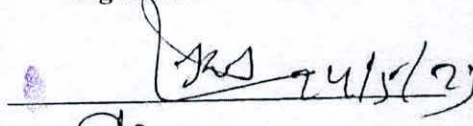
Signature of the Principal
Dr. H Ramakrishna
Principal

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. Dr. Praveen Kumar

2. Shruti S.

SAPTHAGIRI COLLEGE OF ENGINEERING

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Bengaluru-560057

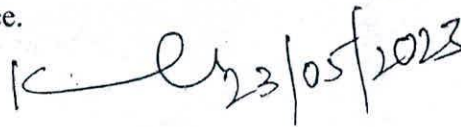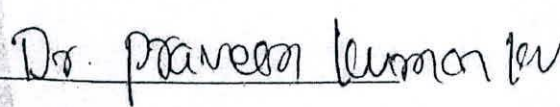# Department of Computer Science and Engineering

(Accredited by NBA)

SAPTHAGIRI
College of Engineering

Certificate

Certified that the Project Work entitled "ML and NLP Techniques to Evaluate Subjective Scripts" carried out by Navdeep Tanwar (1SG19CS066), Padmini Sharma (1SG19CS072), Rahul Kumar (1SG19CS081), Rajat Yadav (1SG19CS082), 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 2022-2023. 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.

24/05/2023

24/5

Signature of the Guide
Prof. Madhushree
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

1. Dr. Praveen Kumar

24/5/2

2. Shruthi S.

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

24/05/23

(29)

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 "IOT BASED TRAFFIC MANAGEMENT SYSTEM FOR EMERGENCY VEHICLES" carried out by ANUBHAW ANAND (1SG19CS010), MAYANK RAJ (1SG19CS060), PRIYESH RAJ (1SG19CS080), SHEJAL SINGH (1SG19CS095), 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 2022-2023. 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.
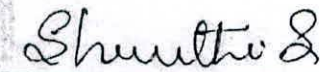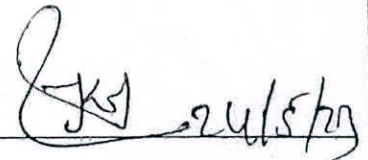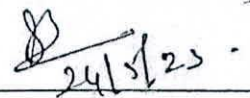
Signature of the Guide	Signature of the HOD	Signature of the Principal
Ms. Hemalatha K	Dr. Kamalakshi Naganna	Principal
Assistant Professor	Professor & Head	Dr. H Ramkrishna
		Sapthagiri College of Engineering
		Chikkasandra, Hesaraghatta Road
		Bangalore- 560 057

EXTERNAL EXAMINATION:

1. Dr. praveen kumar kv

2. Shrutha S

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Department of Computer Science and Engineering

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SAPTHAGIRI
College of Engineering

Certificate

Certified that the Project Work entitled "ROBOTIC SOLDIER ASSISTANT VEHICLE" carried out by Abhay Smaran Halemane (1SG19CS001), Adharsh Bhanu Sharma B S(1SG19CS004), Karthik K (1SG19CS045), Likith Krishna S G (1SG19CS054), 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 2022-2023. 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.

24/05/2023

Signature of the Guide
Prof. Anuradha Badage
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
Chikkasandra, Hesaraghatta Road
Bangalore- 560 057

1.

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 "DEEPFAKE CREATION AND IDENTIFICATION USING DEEP LEARNING" carried out by Anusha D V (1SG19CS012), Muskan (1SG19CS064), Rakshith K Panchalingalu (1SG19CS084), Sahitya Modi (1SG19CS088), 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 2022-2023. 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.

23/05/2023

24/5

Signature of the Guide
Prof. Shashi Rekha G
Assistant Professor

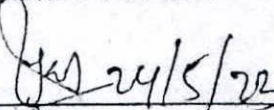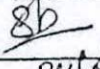**Signature of the HOD**
Dr. Kamalakshi Naganna
Professor & Head

Signature of the Principal
Dr. H Ramakrishna
Principal

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. Dr praveen kumar P   Principal
Sapthagiri College of Engineering   24/5/23
2. Shrutti S .   Chikkasandra, Hesaraghatta Road   24/6/23
Bangalore- 560 057

27

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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 "DCONNECT – DECENTRALIZED SOCIAL MEDIA APPLICATION" carried out by SAMBRAM SHETTY (1SG19CS089), SANDHYA S (1SG19CS092), SRIRAM MISHRA H K (1SG19CS105), SRISHA NAG C S (1SG19CS106), 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 2022-2023. 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.

24/05/2023

Signature of the Guide
Dr. Kamalakshi Naganna
Professor & Head

24/05/2023

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head
Computer Science Engineering
Sapthagiri College of Engineering
Bangalore - 57

24/5

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

EXTERNAL EXAMINATION:

Name of the Examiners

1. Poornima C J

2. Shwetha. K

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

Signature with Date

25/5/23

25/05/23

28

Department of Computer Science and Engineering
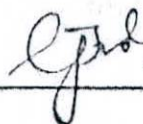
(Accredited by NBA)

Certificate

Certified that the Project Work entitled "SOLAR DRIVE-IN ELECTRIC VEHICLE CHARGING HUB" carried out by ROHITH S (1SG19CS086), SANJANA PATIL (1SG19CS093), SRUSHTI K S (1SG19CS108), VINUTHA D S (1SG19CS122), 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 2022-2023. 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.

24/05/2023

Signature of the Guide
Prof. Sashi Rekha G
Assistant Professor

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head of the Department
Professor & Head
Computer Science Engineering
Sapthagiri College of Engineering
Bangalore - 57

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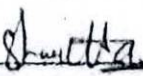Bangalore- 560 057

EXTERNAL EXAMINATION:

Name of the Examiners

1. Poornima. G. J

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

2. Shwetha. K

Signature with Date

3/5/23

Shwetha. K 25/05/23

SAPTHAGIRI COLLEGE OF ENGINEERING

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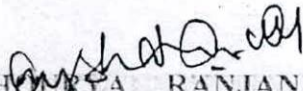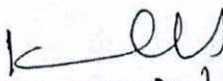
Department of Computer Science and Engineering
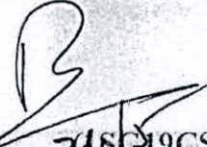
(Accredited by NBA)

SAPTHAGIRI
College of Engineering

Certificate

Certified that the Project Work entitled "SMART ELECTORAL VOTING SYSTEM USING FACIAL RECOGNITION" carried out by KARAN RAJ (1SG19CS044), SHOURYA RANJAN (1SG19CS099), SHUBHAM RAJ (1SG19CS101), VANSHAJ RAJ (1SG19CS118), 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 2022-2023. 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.

SHOURYA RANJAN (1SG19CS099)	SHUBHAM RAJ	RAJ (1SG19CS101).
Signature of the Guide	**Signature of the HOD**	**Signature of the Principal**
Prof. Vyshnavi Manjunathy	Dr. Kamalakshi Naganna	Dr. H Ramkrishna
Assistant Professor	Professor & Head	Principal

EXTERNAL EXAMINATION:

Name of the Examiners   Signature with Date

1. Poornima . R . J   Principal   25/5/23
                                               Sapthagiri College of Engineering
                                               Chikkasandra, Hesaraghatta Road
2. Shwetha. K   Bangalore-560057   Shwetha K 25/05/23

SAPTHAGIRI COLLEGE OF ENGINEERING

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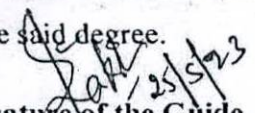
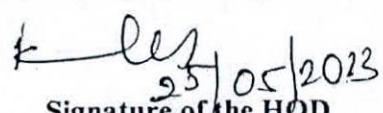Bengaluru-560057

Department of Computer Science and Engineering

Accredited by NBA

SAPTHAGIRI
College of Engineering

CERTIFICATE

Certified that the Project Work entitled "AUTOMATIC PET FEEDER USING IOT" carried out by MONISH KUMAR P (1SG19CS062), PRAMOD (1SG19CS076), SHIV PRASAD (1SG19CS097), SUNIL A (1SG19CS110), 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 20222023. 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. Rakesh Kalsheety
Assistant Professor

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head

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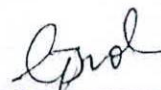Bangalore-560 057

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

1. Shwetha K

Shwetha K 25/05/23

2. Poornima. G

25/5/23.

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore-560 087

SAPTHAGIRI COLLEGE OF ENGINEERING

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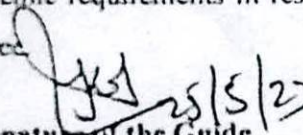9001-2015 & 14001-2015 Certified. Accredited by NAAC with 'A' Grade

Bengaluru-560057

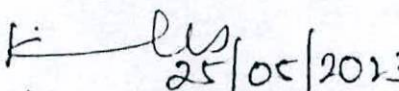## Department of Computer Science and Engineering
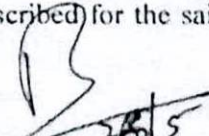
(Accredited by NBA)

Certificate

Certified that the Project Work entitled "DEBLUR: REMOVING MILD BLUR USING DEEP LEARNING" carried out by SHIVANI KUMARI (1SG19CS098), SAJAD AHMAD RATHER (1SG19CS126), YASHRAJ GUPTA (1SG19CS125), MD WAJAHAT RAZA (1SG17CS050), bonafide students of Sapthagiri College of Engineering, in partial fulfilment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2022-2023. 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 K V
Professor

Signature of the HOD
25|05|2013
Dr. Kamalakshi Naganna
Professor & Head

Signature of the Principal
Dr. H Ramakrishna
Principal

EXTERNAL EXAMINATION:

Name of the Examiners   Signature with Date

1. Shwetha K   shwetha.K 25/05/23

2. Poornam. G J   Principal   3rd 24/5/23
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore-560 057

SAPTHAGIRI COLLEGE OF ENGINEERING

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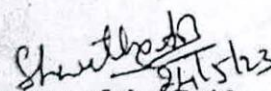Bengaluru-560057

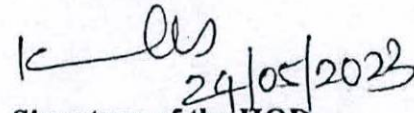# Department of Computer Science and Engineering

(Accredited by NBA)
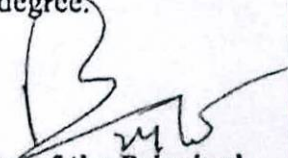
SAPTHAGIRI
College of Engineering

Certificate

Certified that the Project Work entitled "A REAL TIME FIRE DETECTION USING DEEP CONVOLUTION NEURAL NETWORK AND LONG-SHORT TERM MEMORY IN VIDEO SURVEILLANCE" carried out by ABHILASH S (1SG19CS003), AMOGHA NATEKAR J (1SG19CS006), CHARAN S (1SG19CS021), DEEKSHITH G D (1SG19CS025), 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 2022-2023. 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.

24/05/2023

Signature of the Guide
Prof.Shwetha A B
Assistant Professor

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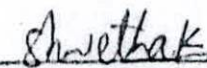
Signature of the Principal
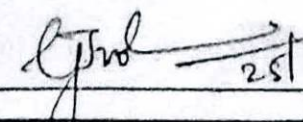Dr. H Ramkrishna
Principal

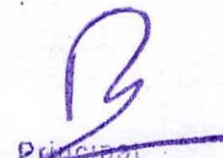**EXTERNAL EXAMINATION:**

Name of the Examiners

Signature with Date

1. _Shwetha K_   _Shwethak, 25/05/23_

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

2. _Poornima. G. J_   _25/5/23_

(33)

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 "AUTOMATED GREENHOUSE AND FIELD CULTIVATION MONITORING SYSTEM UTILIZING IOT " carried out by BHUVAN GOWDA B S (1SG18CS019), DARSHAN S (1SG18CS022), MUDEGOWDARVINAY (1SG18CS058), PRAJWAL P (1SG18CSO71), 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 2022-2023. 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.

Kruth. T.C

24|5|2023

Signature of the Guide
Prof. Kruthi T C
Assistant Professor

K _____ 23/05/2023

Signature of the HOD
Dr. Kamalakshi Naganna
Professor & Head

24|5

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

EXTERNAL EXAMINATION:

Name of the Examiners

1. Shwetha. K

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

2. Poornima. e. J

Signature with Date

Shwetha k. 25/05/23

25/5/23

34.

SAPTHAGIRI COLLEGE OF ENGINEERING

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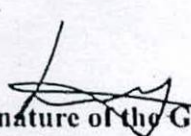ISO 9001-2015 & 14001-2015 Certified, Accredited by NAAC with 'A' Grade
Bengaluru-560057

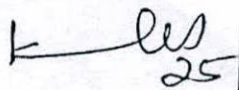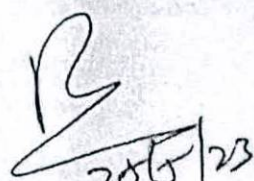# Department of Computer Science and Engineering

(Accredited by NBA)

Certificate

Certified that the Project Work entitled "**ELECTRICITY THEFT DETECTION USING MACHINE LEARNING**" carried out by ASHISH SINGH (1SG19CS014),N VENU MAADHAV (1SG19CS065), SHEKHAR (1SG19CS096), KISHOR J(1SG19CS048), 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 2022-2023. 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.

25/05/2023   20/5/23

Signature of the Guide	Signature of the HOD	Signature of the Principal
Prof. Lavanya K	Dr. Kamalakshi Naganna	Dr. H Ramakrishna
Professor	Professor & Head	Principal

EXTERNAL EXAMINATION:

Name of the Examiners   Signature with Date

1. Shwetha.K   Shwetha.K 25/05/23

2. Poornima · G   25/5/23

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

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