SR   RINIVASA EDUCATIONAL AND CHAR   BLE TRUST®

SAPTHAGIRI COLLEGE OF ENGINEERING

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

(Accredited by NAAC with "A" grade) (NBA Accredited-CSE, ECE, EEE, ISE, ME)

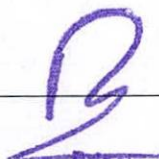(An ISO 9001:2015 & ISO 14001:2015 Certified)

DEPARTMENT OF ISE

Project Work

Semester / Section: VIII A   **Academic Year: 2022-23**

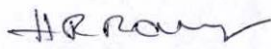| Batch No.	USN	Name of the Student	Project Title
A-1	1SG19IS060	Niharika Jagadeesh Patil	Brain hemorrhage detection in CT scans using deep learning and CNN
	1SG19IS037	Harshitha H M	
	1SG19IS093	Shashank K G	
	1SG19IS002	Akanksha Kumari Gupta	
A-2	1SG19IS001	Aditya Raj	Dyslexia detection using machine learning
	1SG19IS004	Anant Shripad Hedge	
	1SG19IS008	Anjali Jha	
	1SG19IS017	Avinash Kumar	
A-3	1SG19IS006	Anitha N	Forest fire and fire hawk response system using deep learning based approaches using Deeplearning
	1SG19IS009	Ankita N	
	1SG19IS031	Gaurav R	
	1SG19IS036	Harshith C M	
A-4	1SG19IS042	Kapila Rajeshwari S	Real time emotion based music player using Deeplearning
	1SG19IS043	Karthik Bharadwaj P	
	1SG19IS053	Mithun Kumar P H	
	1SG19IS055	Monica D	
A-5	1SG19IS025	Chaitra T P	Sign language recognition using machine learning
	1SG19IS029	G Himabindhu	
	1SG19IS030	Gagan B G	
	1SG19IS021	Balaji U	

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

Batch No.	USN	Name of the Student	Project Title
A-6	1SG19IS022	Bhavana N	Farmers assistant using AI voice BOT
	1SG19IS038	Harshitha M	
	1SG19IS032	Gokul Das K	
	1SG19IS063	Nithin J	
A-7	1SG19IS039	Jahnavi B N	Stress detection in IT professional by image processing and machine learning
	1SG19IS041	Jyothi G	
	1SG19IS028	Devika R	
	1SG19IS033	Gourav Rao Y	
A-8	1SG19IS015	Ashritha N	Criminals and missing children identification using HAAR Cascade
	1SG19IS020	B S Aniruddha	
	1SG19IS051	Manjesh Kumar L D	
	1SG19IS059	Namratha N	
A-9	1SG19IS007	Anjali	Potholes detection with driver assistance
	1SG19IS012	Anushka Priya	
	1SG19IS019	Ayush Sinha	
	1SG19IS010	Anshuman Mishra	
A-10	1SG19IS047	Kirti Kumar	Smart facial recognition attendance system
	1SG19IS048	Krishna Lath	
	1SG19IS049	Kumar Shreeyush	
	1SG19IS061	Nikesh Kumar	
A-11	1SG19IS014	Asharani M G	Image forgery detection using convolution neural networks.
	1SG19IS044	Kavana S D	
	1SG19IS034	H M Shreya	
A-12	1SG19IS003	Aman Bhardwaj	Malware Detection using Machine Learning
	1SG19IS024	Brhmadic Kumar Gautam	
	1SG19IS035	Harsh Kumar Ambasta	
A-13	1SG19IS011	Anusha M	Epileptic seizure detection using EEG signals
	1SG19IS013	Apoorva R	
	1SG19IS016	Ashwini M	
A-14	1SG18IS007	Aman Akash	Decentralized social network using block chain
	1SG17IS054	Mohith D	

A-15	1SG19IS057	Nakul Vishnu Achari	Ubiquitous monitoring based smart fish farming aquaculture system
	1SG19IS045	Kavya B R	
	1SG19IS056	N Rachana Adiga	
A-16	1SG19IS005	Aniket Shukla	Pharmaceutical supply chain management using block chain technology
	1SG19IS026	D Dhulasi Dheepthi	
	1SG19IS040	Janavi S	
A-17	1SG19IS054	Mohan N	Livestock management with unmanned aerial vehicles
	1SG19IS058	Nallaghatta Satya Venkata Narasimha	
	1SG19IS062	Nisha A B	
	1SG19IS050	Lohith B N	
A-18	1SG19IS018	Ayush Kumar Dubey	Crop yield prediction based on Indian agriculture using machine learning
	1SG19IS046	Khushi Sinha	
	1SG19IS052	Meshu Priy	

Project Coordinator

(Dr. Prerana Chaithra)

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

HOD
Dr H.R Ranganatna
Prof. & H.O.D
Dept.of Information Science & Engg.
Sapthagiri College of Engineering
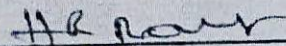# 14/5 Chikkasandra, Hesaraghatta Main Road
BENGALURU-560 05

SR. SRINIVASA EDUCATIONAL AND CHARITABLE TRUST®

SAPTHAGIRI COLLEGE OF ENGINEERING

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

(Accredited by NAAC with "A" grade) (NBA Accredited-CSE, ECE, EEE, ISE, ME)

(An ISO 9001:2015 & ISO 14001:2015 Certified)
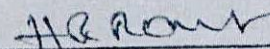
DEPARTMENT OF ISE

SAPTHAGIRI
College of Engineering
Creating Tomorrow

SCE IQAC

Project Work

Semester / Section: VIII B   **Academic Year: 2022-23**
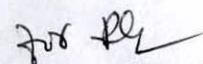
Batch No.	USN	Name of the Student	Student Sign
B-1	1SG19IS103	Soujanya	Information security by biometric water marking using-AI&ML
	1SG19IS115	Vaishnavi M	
	1SG19IS122	Yashaswini K S	
	1SG19IS123	Yashaswini R	
B-2	1SG19IS095	Shivam Kumar	Self driving automobile for disabled people using machine learning
	1SG19IS098	Shruti Pandey	
	1SG19IS100	Siddhi Yeshwant Sonwalkar	
	1SG19IS114	Utkarsh Mandilwar	
B-3	1SG20IS400	Naisargi Dave	YOLO G: - Detection of military targets and enhancing performances with light weighted network model
	1SG19IS101	Silpa Kumari	
	1SG20IS402	Chandana S	
	1SG20IS403	Supriya Modak	
B-4	1SG19IS116	Vignesh K	Nano tree based charging system using IOT
	1SG19IS127	Amar Singh	
	1SG19IS072	Pratyaksha Narasimha Ambig	
	1SG19IS080	Rahul B	
B-5	1SG19IS117	Vignesh Shanubhog H	Smart wearable device for women safety using IOT
	1SG19IS111	Tarun S	
	1SG19IS104	Sriharsha C P	
	1SG19IS084	Rohit B N	

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057
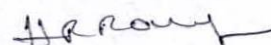
Batch No.	USN	Name of the Student	Project Title
B-6	1SG19IS066	Pavan Gowda R	Asthma risk prediction and inhaler monitoring using IOT
	1SG19IS068	Pranam M	
	1SG19IS112	Tejas M C	
	1SG19IS113	Ullas G	
B-7	1SG19IS077	Pulkit Kumar	Diabetic retinopathy clarification from retinal images
	1SG19IS096	Shreya Ranjan	
	1SG19IS097	Shreyshi	
	1SG19IS110	Tanyaprasad	
B-8	1SG19IS071	Prashant Kumar	Secure electronic medical record sharing using block chain technology
	1SG19IS065	Niveditha Rao	
	1SG19IS078	R Bhargavi	
	1SG19IS092	Shabnoor Jaha	
B-9	1SG19IS102	SK Zaved Akhtar	Vehicle emissions and Traffic violation detection system using deep learning
	1SG19IS099	Shubham Agarwal	
	1SG19IS105	Srikant Mishra	
	1SG19IS106	Sujeet Kumar	
B-10	1SG19IS070	Pranav S Hegde	Charity and donation tracking system using block chain
	1SG19IS064	Nithin S	
	1SG19IS088	Selva Murugan	
	1SG19IS120	Vishal Sai S	
B-11	1SG19IS074	Priyadarshini S	Intrusion Detection and prevention system with honey pot using cloud computing
	1SG19IS075	Priyanka D N	
	1SG19IS079	Rachana S	
	1SG19IS089	Sahana N	
B-12	1SG19IS081	Rakshitha H	Dynamic cloud resource allocation considering demand uncertainty
	1SG19IS082	Rakshitha V	
	1SG19IS107	Surabhi M	
	1SG19IS109	Swathi S	
B-13	1SG19IS067	Prabhat Shandiliya	MyPass : A secured password manager
	1SG19IS085	Rohit Kumar	
	1SG19IS125	Zille Hussain	
	1SG19IS121	Wamique Hashmi	

Batch No.	USN	Name of the Student	Student Sign
B-14	1SG19IS076	Priyansh Dwivedi	False requitment pasting prediction using ML
	1SG19IS090	Sanjana Sinha	
B-15	1SG19IS069	Pranav N	Automated agrobot for smart forming using ubiquitous computing
	1SG19IS086	Rohith Ganapathi Bhat	
	1SG19IS087	S Kaushal	
	1SG19IS126	Nadeem Pasha	
B-16	1SG19IS073	Prince Manani	Emotion detection analysis using CNN algorithm
	1SG19IS083	Rohan R Vibhuti	
	1SG19IS119	Vikrant	
	1SG19IS124	Yogeeshwar P	
B-17	1SG19IS091	Sarvajit Ashok Bhat	Automatic smart voting system using HAAR cascade algorithm
	1SG19IS093	Shashank K G	
	1SG19IS094	Shivali B M	
	1SG19IS108	Swaroop Chand J C	

Project Coordinator

(Dr. Prerana Chaithra)

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

HOD
Dr H.R Ranganatna
Prof. & H.O.D
Dept.of Information Science & Engg
Sapthagiri College of Engineering
14/5 Chikkasandra, Hesaraghatta Main Roa
BENGALURU-560 05

SRI SRINIVASA EDUCATIONAL AND CHARITABLE TRUST®
SAPTHAGIRI COLLEGE OF ENGINEERING
(Affiliated to Visvesvaraya Technological University, Belagavi and Approved by
AICTE, New Delhi)
(Accredited by NAAC with "A" grade) (NBA Accredited-CSE, ECE, EEE, ISE, ME)
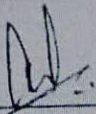(An ISO 9001:2015 & ISO 14001:2015 Certified)
DEPARTMENT OF ISE

SCE
IQAC

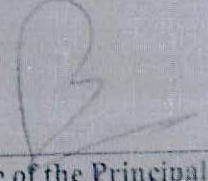# Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled Brain Hemorrhage Detection In CT Scan Using Deep Learning And CNN carried out by Ms. Akanksha Kumari Gupta (1SG19IS002), Ms. Harshitha HM (1SG19IS037), Ms. Niharika J Patil (1SG19IS060) and Mr. Sharan S (1SG18IS093) bonafide students of 8th semester, Department of Information Science & Engineering carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in Information **Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

_____
Signature of the Guide

Dr. H R Ranganatha
Professor & Head

_____
Signature of the HOD

Dr. H R Ranganatha
Professor & Head

_____
Signature of the Principal

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

Signature with date

Name of the Examiners

1. _B. VANI_____

2. _Annradha B_____

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

15/23

Department of Information Science & Engineering

CERTIFICATE

Certified that the Project Work Phase-2 (18CSP83) entitled "DYSLEXIA DETECTION USING MACHINE LEARNING" carried out by Mr. Aditya Raj (1SG19IS001), Mr. Anant Hegde (1SG19IS004), Ms. Anjali Jha (1SG19IS008) and Mr. Avinash Kumar (1SG19IS017) bonafide students of 8th semester, Department of Information Science & Engineering was carried out at our college Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering in Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.
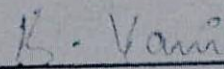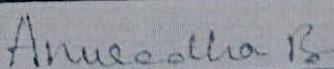
Signature of the Guide   Signature of the HOD   Signature of the Principal
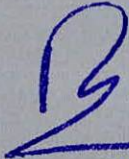
Dr. Prerana Chaithra   Dr. H R. Ranganatha   Principal
Associate Professor   Professor & Head   Sapthagiri College of Engineering
     Chikkasandra, Hesaraghatta Road
     Bangalore-560 057

Name of the Examiners   Signature with date

1. B. VANI

2. Anusadha B

Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled "FOREST FIRE AND FIRE HAWK RESPONSE SYSTEM USING DEEP LEARNING BASED APPROACHES" carried out by Ms. Anitha N (1SG19IS006), Ms. Ankita N (1SG19IS009), Mr. Gaurav R (1SG19IS031) and Mr. Harshith C M (1SG19IS036) bonafide students of 8th semester, Department of Information Science & Engineering was carried out at our college Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in Information Science & **Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Gayathri R

Signature of the Guide

Prof. Gayathri R
Assistant Professor

Heran

Signature of the HOD

Dr. H.R. Ranganatha
Professor & Head

Signature of the Principal

13|8
Dr. H Ramakrishna
Principal

Signature with date

Name of the Examiners

1. B. VANI

2. Anuradha B

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road,
Bengaluru - 55

SRI SRINIVASA EDUCATIONAL AND CHARITABLE TRUST®
SAPTHAGIRI COLLEGE OF ENGINEERING
(Affiliated to Visvesvaraya Technological University, Belagavi and Approved by AICTE, New Delhi)
(Accredited by NAAC with "A" grade) (NBA Accredited-CSE, ECE, EEE, ISE, ME)
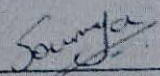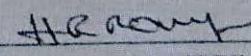(An ISO 9001:2015 & ISO 14001:2015 Certified)
DEPARTMENT OF ISE

SCE
IQAC

SAPTHAGIRI
College of Engineering
Creating Tomorrow

Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled "REAL TIME "EMOTION BASED MUSIC PLAYER USING DEEP LEARNING" carried out by **Kapila Rajeshwari S (1SG19IS042), Karthik Bharadwaj P(1SG19IS043), Mithun Kumar P H(1SG19IS053), Monica D(1SG19IS055)** bonafide students of 8th semester, Department of Information Science & Engineering was carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering in Information Science & Engineering** of the Visvesvaraya Technological University, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Signature of the Guide	Signature of the HOD	Signature of the Principal
Prof. Ramya R Assistant Professor	Dr. H.R. Ranganatha Professor & Head	Dr. H Ramakrishna Principal

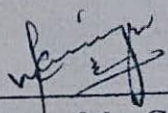**Name of the Examiners**

1. K. Vani

2. Anusudha B

Signature with date

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

SRI SRINIVASA EDUCATIONAL AND CHARITABLE TRUST®

SAPTHAGIRI COLLEGE OF ENGINEERING

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

(Accredited by NAAC with "A" grade) (NBA Accredited-CSE, ECE, EEE, ISE, ME)

(An ISO 9001:2015 & ISO 14001:2015 Certified)

DEPARTMENT OF ISE
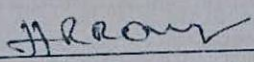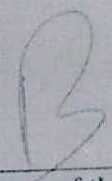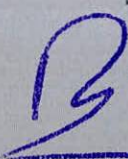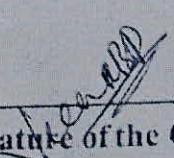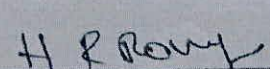
Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled SIGN LANGUAGE RECOGNITION USING MACHINE LEARNING carried out by Mr. Balaji U (1SG19IS021), Ms. Chaitra T P (1SG19IS025), Ms. G Himabindhu (1SG19IS029), Mr. Gagan B G (1SG19IS030), bonafide students of 8th semester, Department of Information Science & Engineering carried out at our college Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering in Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Signature of the Guide	Signature of the HOD	Signature of the Principal
Sowmya Somanath	Dr. H.R. Ranganatha	
Assistant Professor	Professor & Head	

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

Name of the Examiners   **Signature with date**

1. B. Vani

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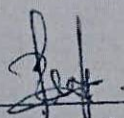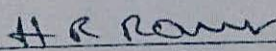14/5, Chikkasandra, Hesaraghatta Road
Bengaluru - 560 057

2. Anusadha B

Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled "FARMERS ASSISTANT USING AI CHAT BOT" carried out by **Ms. Bhavana N(1SG19IS022), Mr. Gokul Das K(ISG19IS032), Ms. Harshitha M(ISG19IS038) and Mr. Nithin J (1SG19IS063)**, bonafide students of 8th semester, Department of Information Science & Engineering was carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award **of Bachelor of Engineering** in Information Science & **Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Signature of the Guide
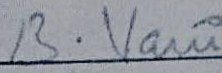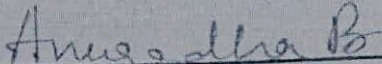
Prof. Chaitanya V
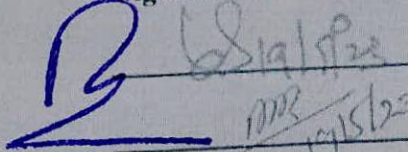Assistant Professor

Signature of the HOD

Dr. H.R. Ranganatha
Professor & Head

Signature of the Principal

Dr. H Ramakrishna
Principal

Name of the Examiners

1. B. VANI

2. Anuradha B

Signature with date

Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP87)** entitled Stress detection in IT professionals using machine learning and image processing carried out by **Ms.Devika R. (1SG19IS028), Mr. Gourav Rao Y. (1SG19IS033),Ms. Jahnavi B.N. (1SG19IS039), Ms. Jyothi G.(1SG19IS041)** bonafide students of 8 semester, Department of Information Science & Engineering carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering in Information Science & Engineering** of the Visvesvaraya Technological University, Belagavi during the year 2022-23. It is certified that all corrections/suggestions indicated for Final Assessment have been incorporated in the Report deposited in the departmentallibrary. The project report has been approved as it satisfies the academic requirements in respect of Project work Phase 2 prescribed for the said Degree.

Signature of the Guide

Prof. Veena Dhavalgi
Assistant Professor

Signature of the HOD

Dr. H.R. Ranganatha
Professor & Head

Signature of the Principal

Dr. H Ramakrishna
Principal

Name of the Examiners

Signature with date

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

1. _____

2. _____

ii

Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled "CRIMINALS AND MISSING CHILDREN IDENTIFICATION USING HAAR CASCADE" carried out by **Ms. Ashritha N (1SG19IS015), Mr. B S Aniruddha (1SG19IS020), Mr. Manjesh Kumar L D (1SG19IS051), Ms. Namratha N (1SG19IS059)**, bonafide students of 8th semester, Department of Information Science & Engineering was carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2022-23. It is certified that all corrections/suggestions indicated for Final Assessment havebeen incorporated in the Report deposited in the departmental library. Theproject report has been approved as it satisfies the academic requirements in respect of Project work Phase-2 prescribed for the said Degree.

Signature of the Guide

Prof. Priyanka M R
Assistant Professor

Signature of the HOD

Dr. H.R. Ranganatha
Professor & Head

Signature of the Principal

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

Name of the Examiners

Signature with date

1. B. Vani

2. Anuradha B

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

DEPARTMENT OF ISE

CERTIFICATE
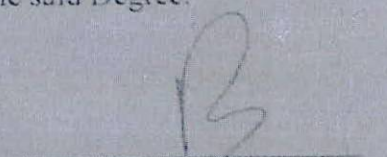
Certified that the **Project Work Phase-2 (18CSP83)** entitled Pothole Detection For Driver Assistance carried out by **Ms. Anjali (1SG19IS007), Mr. Anshuman Mishra (1SG19IS010), Ms. Anushka Priya (1SG19IS012), Mr. Ayush Sinha (1SG19IS019)** bonafide students of 8th semester, Department of Information Science & Engineering carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University, Belagavi** during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Signature of the Guide

Signature of the HOD

Signature of the Principal

Prof. Ambika S
Assistant Professor

Dr. H.R. Ranganatha
Professor & Head

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

Name of the Examiners

Signature with date

1. B. Varu

2. Anuradha B

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

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to Visvesvaraya Technological University, Belagavi and Approved by
AICTE, New Delhi)
(Accredited by NAAC with "A" grade) (NBA Accredited CSE, ECE, EEE, ISE, ME)
(An ISO 9001:2015 & ISO 14001:2015 Certified)
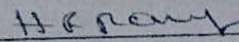
DEPARTMENT OF ISE

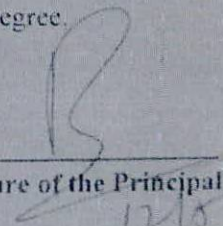## Department of Information Science & Engineering

CERTIFICATE

Certified that the Project Work Phase-2 (18CSP83) entitled "SMART FACIAL RECOGNITION ATTENDANCE SYSTEM" carried out by Mr. Kirti Kumar (1SG19IS047), Mr. Krishna Lath (1SG19IS048) and Mr. Nikesh Kumar (1SG19IS061), bonafide students of 8th semester, Department of Information Science & Engineering was carried out at our college Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of Bachelor of Engineering in Information Science & Engineering of the Visvesvaraya Technological University, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Signature of the Guide

Prof. Roopa K.T
Assistant Professor

Signature of the HOD

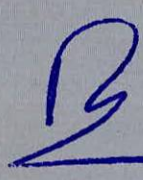Dr. H.R. Ranganatha
Professor & Head

Signature of the Principal

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

Name of the Examiners

Signature with date

1. _____

2. MARY M D'SOOJ

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

SRI SRINIVASA EDUCATIONAL AND CHARITABLE TRUST®
SAPTHAGIRI COLLEGE OF ENGINEERING
(Affiliated to Visvesvaraya Technological University, Belagavi and Approved by AICTE, New Delhi)
(Accredited by NAAC with "A" grade) (NBA Accredited-CSE, ECE, EEE, ISE, ME)
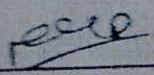(An ISO 9001:2015 & ISO 14001:2015 Certified)
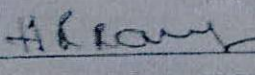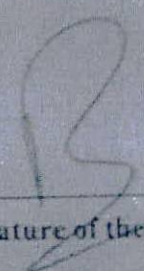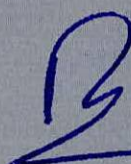## DEPARTMENT OF ISE

SCE IQAC

SAPTHAGIRI
College of Engineering
Creating Tomorrow

Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled **Image Forgery Detection Using Convolutional Neural Network** carried out by **Ms. Asharani M G (1SG19IS014), Ms. H M Shreya (1SG19IS034), Ms. Kavana S D (1SG19IS044)** bonafide students of 8th semester. Department of Information Science & Engineering carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in Information Science & Engineering of the Visvesvaraya Technological University, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Signature of the Guide	**Signature of the HOD**	**Signature of the Principal**
Prof. Rajeshwari R	Dr. H.R. Ranganatha	Dr. H Ramakrishna
Assistant Professor	Professor & Head	Principal

Name of the Examiners   **Signature with date**

1. H R RANGANATH   Haram 21/5/23

2. MARY M D'SOUZA

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

SAPTHAGIRI COLLEGE OF ENGINEERING

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

(Accredited by NAAC with "A" grade) (NBA Accredited-CSE, ECE, EEE, ISE, ME)
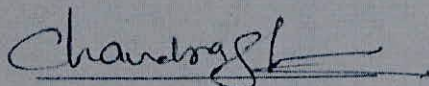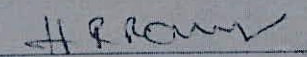(An ISO 9001:2015 & ISO 14001:2015 Certified)

DEPARTMENT OF ISE

Department of Information Science & Engineering

CERTIFICATE

Certified that the Project Work Phase-2 (18CSP83) entitled "MALWARE DETECTION USING MACHINE LEARNING" carried out by Mr. Aman Bhardwaj (1SG19IS003), Mr. Brhmadic Kumar Gautam (1SG19IS024) and Mr. Harsh Kumar Ambasta (1SG19IS035), bonafide students of 8th semester, Department of Information Science & Engineering was carried out at our college Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of Bachelor of Engineering in Information Science & Engineering of the Visvesvaraya Technological University, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Signature of the Guide	Signature of the HOD	Signature of the Principal
Prof. Nandini Gowda P	Dr. H.R. Ranganatha	Dr. H Ramakrishna
Assistant Professor	Professor & Head	Principal

Name of the Examiners

Signature with date

1. H R RANGANATH

2. MARY M D'SOUZA

Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-1** (18CSP77) entitled "EPILEPTIC SEIZURE DETECTION USING EEG SIGNALS" carried out by Ms. Anusha M (1SG19IS011) Ms. Apoorva R (1SG19IS013), Ms. Ashwini M (1SG19IS016) bonafide students of 8th semester, Department of Information Science & Engineering carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2022-23. 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 Phase 2 prescribed for the said Degree.

Signature of the Guide
Prof. Manasa P M
Assistant Professor

Signature of HOD
Dr. H R Ranganatha
Professor & Head

Signature of the Principal
Dr. H Ramakrishna
Principal

Name of the Examiners

1. H R RANGANATH

2. MARY. M D'souza

Signature with date

22/5/23

22/5/23

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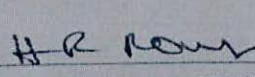14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057
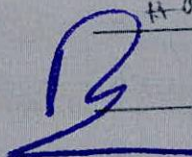
Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled "DECENTRALIZED SOCIAL NETWORK USING BLOCKCHAIN" carried out by Mr. Aman Akash (1SG18IS007) and Mr. Mohith D (1SG17IS054), bonafide students of 8th semester, Department of Information Science & Engineering was carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Signature of the Guide	Signature of the HOD	Signature of the Principal
Prof. Chandrashekar CM Assistant Professor	Dr. H.R. Ranganatha Professor & Head	Dr. H Ramakrishna Principal

Name of the Examiners

Signature with date

1. H R RANGANATHA   H R Rau 22/5/23

2. MARY M D'SOUZA

Principal 22/5/23.

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

Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled "**UBIQUITOUS MONITORING BASED SMART FISH FARMING AQUACULTURE SYSTEM**" carried out by **Ms. Kavya B R (1SG19IS045), Ms. N Rachana Adiga (1SG19IS056) and Mr. Nakul V A (1SG19IS057)**, bonafide students of 8th semester, Department of Information Science & Engineering was carried out at our college Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering in Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2022-23. It is certified that all corrections/suggestions indicated for Final Assessment havebeen 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-2 prescribed for the said Degree.

Signature of the Guide

Prof. Swetha K B
Assistant Professor

Signature of the HOD

Dr. H.R. Ranganatha
Professor & Head

Signature of the Principal

Dr. H Ramakrishna
Principal

Name of the Examiners

Signature with date

1. H R RANGANATH

2. MARY M D'SOUZA

Principal 22/5/23

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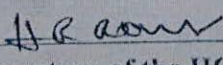14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru

22/5/23

Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitle "PHARMACEUTICAL SUPPLY CHAIN MANAGEMENT USING BLOCKCHAIN TECHNOLOGY" carried out by **Mr. Aniket Shukla (1SG19IS005), Ms. Dhulasi Dheepthi D (1SG19IS026)** and **Ms. Janavi S. (1SG19IS040)** bonafide students of 8th semester, Department of Information Science & Engineering was carried out at our college **Sapthagiri College of Engineering,** Bengaluru in partial fulfillment of the award of **Bachelor of Engineering in Information Science & Engineering** of the **Visvesvaraya Technological University,** Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Signature of the Guide

Dr. Prerana Chaithra
Associate Professor

Signature of the HOD

Dr. H.R. Ranganatha
Professor & Head

Signature of the Principal

Dr. H Ramakrishna
Principal

Name of the Examiners

1. H R LANGANATH
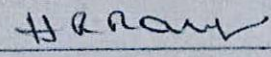
2. MARY . M D'SOUZA

Signature with date

22/5/23

22/5/23

Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled Livestock Management With **Unmanned Aerial Vehicles** carried out by **Mr. Lohith B N(1SG19IS050), Mr. Mohan N(1SG19IS054), Mr. Nallagatla Satya Venkata Narasimha(1SG19IS058), Ms. Nisha A B(1SG19IS062)** bonafide students of 8th semester, Department of Information Science & Engineering carried out at our college Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University,** Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Signature of the Guide	Signature of the HOD	Signature of the Principal
Prof. Gayathri R	Dr. H.R. Ranganatha	Dr. H Ramakrishna
Assistant Professor	Professor & HOD	Principal

Name of the Examiners   **Signature with date**

1. ___H C Papanhagu___

2. ___MARY M D'Sou___

Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled "CROP YIELD PREDICTION USING MACHINE LEARNING "carried out by Mr. Ayush Kumar Dubey (1SG19IS018) , Ms. Khushi Sinha (1SG19IS046) and Mr. Meshu Priy (1SG19IS052) bonafide students of 8th semester, Department of Information Science & Engineering was carried out at our college Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in Information Science & Engineering of the **Visvesvaraya Technological University**, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

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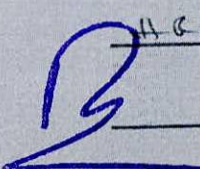Signature of the Principal

Prof. Suma J
Associate Professor

Dr. H.R. Ranganatha
Professor & Head

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

Name of the Examiners

Signature with date

1. H R RANGANATHA   H RAO 2/5/23

2. MARY M D'SOUZA   22/5/23

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057
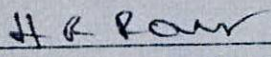
Department of Information Science & Engineering
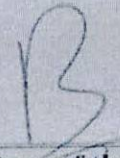
CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled **Information Security By Biometric Watermarking Using Artificial Intelligence and Machine Learning** carried out by **Ms. Soujanya (1SG19IS103), Ms. Vaishnavi M (1SG19IS115), Ms. Yashaswini K S (1SG19IS122), Ms. Yashaswini R (1SG19IS123)** bonafide students of 8' semester, Department of Information Science & Engineering carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering in Information Science & Engineering** of the Visvesvaraya Technological University, Belagavi during the year 2022-23. 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 Phase 2 prescribed for the said Degree.

Signature of the Guide

Dr. H.R. Ranganatha
Professor & Head

Signature of the HOD

Dr. H.R. Ranganatha
Professor & Head

Signature of the Principal

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

Signature with date

Name of the Examiners

1. H R LANYANATH

2. MARY M D'SOUZA
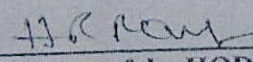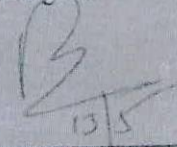
H R RANG 22/5/23

22/5/23

Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled "Self-Driving Automobile for disabled people using Machine Learning" carried out by Mr. Shivam Kumar (1SG19IS095), Ms. Shruti Pandey (1SG19IS098), Ms. Siddhi Yeshwant Sonwalkar (1SG19IS100), Mr. Utkarsh Mandilwar (1SG19IS114), bonafide students of 8th semester, Department of Information Science & Engineering was carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering in Information Science & Engineering** of the Visvesvaraya Technological University, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Signature of the Guide

Signature of the HOD

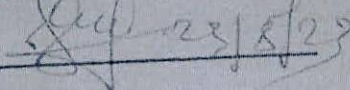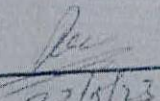Signature of the Principal

Dr. Prerana Chaithra
Associate Professor

Dr. H.R. Ranganatha
Professor & Head

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

Name of the Examiners

Signature with date

1. H R RANGANATH   H R RANG 22|5|23

2. MARY. M D'SOUZA   22|5|23

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

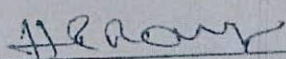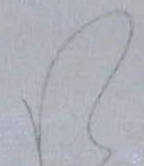## Department of Information Science & Engineering

CERTIFICATE

Certified that the Project Work Phase-2 (18CSP83) entitled "YOLO G: DETECTION MILITARY TARGET USING LIGHTWEIGHT MODEL" carried out by Ms. Silpa Kumari (1SG19IS101), Ms. Naisargi Dave (1SG20IS400), Ms. Chandana S (1SG20IS402), Mr. Supriyo Modak (1SG20IS403) bonafide students of 8th semester, Department of Information Science & Engineering carried out at our college Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of Bachelor of Engineering in Information Science & Engineering of the Visvesvaraya Technological University, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Gayathri R
_____
Signature of the Guide
Prof. Gayathri R
Assistant Professor

_____
Signature of the HOD
Dr. H R Ranganatha
HOD & Professor

_____
Signature of the Principal
Dr. H Ramakrishna
Principal

Name of the Examiners

Signature with date

1. _____

2. _____

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

SRI SRINIVASA EDUCATIONAL AND CHARITABLE TRUST®

SAPTHAGIRI COLLEGE OF ENGINEERING

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

(Accredited by NAAC with "A" grade) (NBA Accredited-CSE, ECE, EEE, ISE, ME)

(An ISO 9001:2015 & ISO 14001:2015 Certified)

DEPARTMENT OF ISE

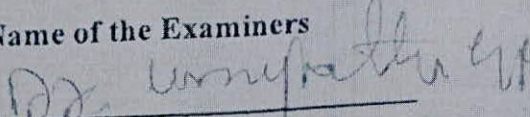## Department of Information Science & Engineering
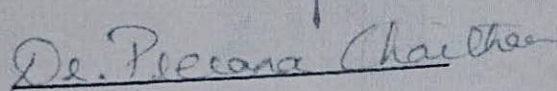
CERTIFICATE
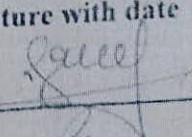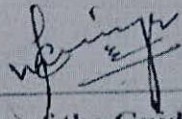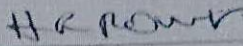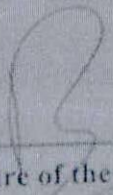
Certified that the **Project Work Phase-2 (18CSP83)** entitled "NANO TREE BASED **CHARING SYSTEM USING IOT**" carried out by Mr. Pratyaksha Narasimha Ambig **(1SG19IS072)** , Mr. Rahul B (1SG19IS080) , Mr. Vignesh K (1SG19IS116) and Mr. **Amar Singh (1SG19IS127)**, bonafide students of 8th semester, Department of **Information** Science & Engineering was carried out at our college Sapthagiri College of **Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering in Information Science & Engineering** of the Visvesvaraya Technological University, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Signature of the Guide

Prof. Ramya R
Assistant Professor

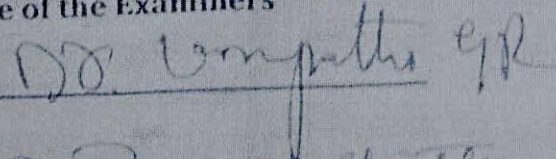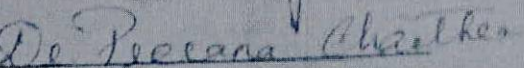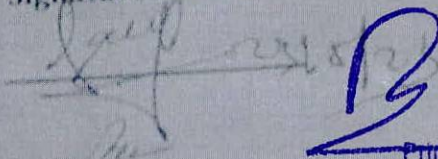**Signature of the HOD**

Dr. H.R. Ranganatha
Professor & Head

Signature of the Principal

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

Signature with date

Name of the Examiners

1. Dr. Vinyyathi y

2. Dr. Prerana Chaithra

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

Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83) Smart wearable device for women safety using IOT** carried out by **Mr. Rohit B N (1SG19IS084), Mr. Sriharsha C P (1SG19IS104), Mr.Tarun S (1SG19IS111)** and **Mr. Vignesh Shanubhog H (1SG19IS117)** bonafide students of 8th semester, Department of Information Science & Engineering carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Signature of the Guide

Prof Sowmya Somanath
Assistant Professor

Signature of the HOD

Dr. H.R. Ranganatha
Professor & Head

Signature of the Principal

Principal
Sapthagiri College of Engineering
Dr. H Ramesh
Chikkasandra, Hesarghatta Road
Bangalore- 560 057

Signature with date

23/5/23

Name of the Examiners

1. Dr. Uma Pattuv M

2. Dr. Poorana Charitha

23/5/23

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 5
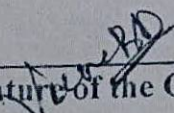
Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled Asthma Risk Prediction and **Inhaler Monitoring using IoT** carried out by **Mr. Pavan Gowda R (1SG19IS066), Mr. Pranam M (1SG19IS068), Mr. Tejas M C (1SG19IS112), Mr. Ullas G (1SG19IS113)** bonafide students of 8th semester, Department of Information Science & Engineering carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in Information Science & Engineering of the Visvesvaraya **Technological University**, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree

Signature of the Guide

Signature of the HOD

Signature of the Principal

Prof. Chaitanya V
Assistant Professor

Dr. H.R. Ranganatha
Professor & Head

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

Signature with Seal

Name of the Examiners

1. Dr. Sampath GR

2. Dr. Pavana Chaithra

23/5/22

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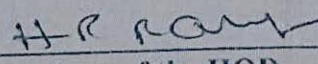Bangaluru - 560 057

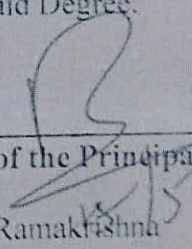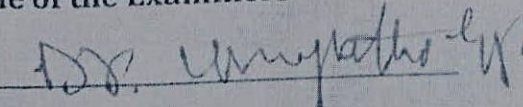# Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled Identification of Diabetic **Retinopathy Using Retinal Images** carried out by **Mr. Pulkit Kumar (1SG19IS077), Ms. Shreya Ranjan (1SG19IS096), Ms. Shreyshi (1SG19IS097), Ms. Tanya Prasad (1SG19IS110)** bonafide students of 8th semester, Department of Information Science & Engineering carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the Visvesvaraya **Technological University**, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Signature of the Guide

Prof. Veena Dhavalgi
Assistant Professor

Signature of the HOD

Dr. H.R. Ranganatha
Professor & Head

Signature of the Principal

Dr. H Ramakrishna
Principal

Name of the Examiners

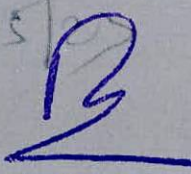Signature with date

1.

2. Dr. Peerana Chietha

SAPTHAGIRI COLLEGE OF ENGINEERING

DEPARTMENT OF ISE

Department of Information Science & Engineering

CERTIFICATE

Certified that the Project Work Phase-2 (18CSP83) entitled "SECURE ELECTRONIC MEDICAL RECORD SHARING USING BLOCKCHAIN TECHNOLOGY" carried out by Ms. Niveditha Rao (1SG19IS065) , Mr. Prashant Kumar (1SG19IS071), Ms. R Bhargavi (1SG19IS078) and Ms. Shabnoor Jaha (1SG19IS092) bonafide students of 8th semester, Department of Information Science & Engineering was carried out at our college Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of Bachelor of Engineering in Information Science & Engineering of the Visvesvaraya Technological University, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Signature of the Guide

Prof. Priyanka M R
Assistant Professor

Signature of the HOD

Dr. H.R. Ranganatha
Professor & Head

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

Name of the Examiners

Signature with date

1.

23/5/23

2.

23/5/23

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

SRI SRINIVASA EDUCATIONAL AND CHARITABLE TRUST®
SAPTHAGIRI COLLEGE OF ENGINEERING
(Affiliated to Visvesvaraya Technological University, Belagavi and Approved by AICTE, New Delhi)
[Accredited by NAAC with "A" grade] [NBA Accredited-CSE, ECE, EEE, ISE, ME]
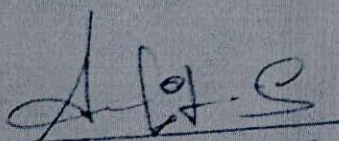(An ISO 9001:2015 & ISO 14001:2015 Certified)
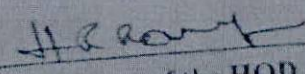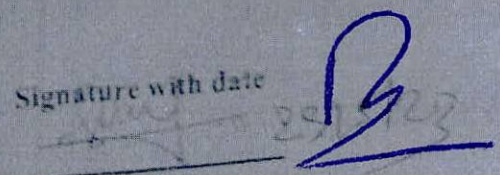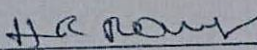## DEPARTMENT OF ISE

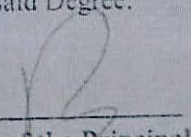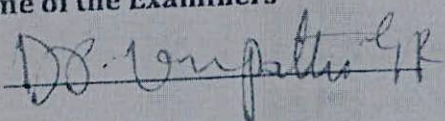## Department of Information Science & Engineering

CERTIFICATE

Certified that the Project Work Phase-2 (18CSP83) entitled "Vehicle Emission and Traffic Violation Detection System using Deep learning "carried out by Mr. Shubham Agarwal (1SG19IS099) and Mr. SK Zaved Akthar (1SG19IS102) and Mr. Srikant Mishra (1SG19IS105) and Mr. Sujeet Kumar (1SG19IS106), bonafide students of 8th semester, Department of Information Science & Engineering was carried out at our college Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of Bachelor of Engineering in Information Science & Engineering of the Visvesvaraya Technological University, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Signature of the Guide

Signature of the HOD

Signature of the Principal

Prof. Ambika S
Assistant Professor

Dr. H.R. Ranganatha
Professor & Head

Dr. H Ramakrishna
Principal

Signature with date

Name of the Examiners

1. _____

2. _____

Principal
Sapthagiri College of Engine
14/5, Chikkasandra, Hesaraghatta Mair
Bengaluru - 560 057

SRI SRINIVASA EDUCATIONAL AND CHARITABLE TRUST®

SAPTHAGIRI COLLEGE OF ENGINEERING

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

(Accredited by NAAC with "A" grade) (NBA Accredited-CSE, ECE, EEE, ISE, ME)

(An ISO 9001:2015 & ISO 14001:2015 Certified)

DEPARTMENT OF ISE

SAPTHAGIRI
College of Engineering
Creating Tomorrow

Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled **Charity and Donation Tracking System using Blockchain** carried out by **Mr. Pranav Hegde (1SG19IS070), Mr. Nithin S (1SG19IS064), Mr. Selva Murugan (1SG19IS088), Mr. Vishal Sai (1SG19IS120)** bonafide students of 8th semester, Department of Information Science & Engineering carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering in Information Science & Engineering** of the Visvesvaraya **Technological University**, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Signature of the Guide

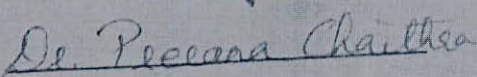Prof. Roopa K.T
Assistant Professor

Signature of the HOD

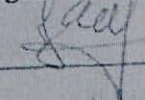Dr. H.R. Ranganatha
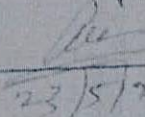Professor & Head

Signature of the Principal

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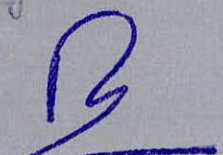Chikkasandra, Hesaraghatta Road
Bangalore- 560 057

Signature with date

Name of the Examiners

1.

2.

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

SRI SRINIVASA EDUCATIONAL AND CHARITABLE TRUST®

SAPTHAGIRI COLLEGE OF ENGINEERING

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

(Accredited by NAAC with "A" grade) (NBA Accredited-CSE, ECE, EEE, ISE, ME)

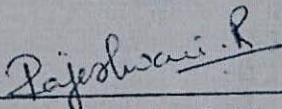(An ISO 9001:2015 & ISO 14001:2015 Certified)
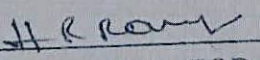
DEPARTMENT OF ISE

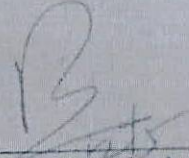## Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled "**INTRUSION DETECTION AND PREVENTION SYSTEM WITH HONEYPOT USING CLOUD COMPUTING**" carried out by **Ms. Priyadarshini S (1SG19IS074), Ms. Priyanka DN (1SG19IS075), Ms. Rachana S (1SG19IS079) and Ms. Sahana N (1SG19IS089)**, bonafide students of 8th semester, Department of Information Science & Engineering was carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering in Information Science & Engineering** of the Visvesvaraya Technological University, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

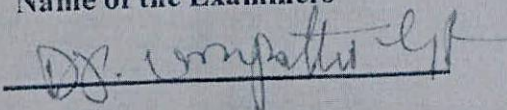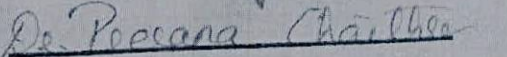Signature of the Guide

Rajeshwari R
Assistant Professor

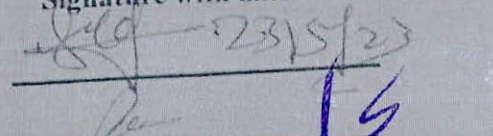Signature of the HOD

Dr. H.R. Ranganatha
Professor & Head

Signature of the Principal

Principal
SapthagDr. Ch Ramakrishna ineering
Chikkasandr Principal ghatta Road,
Bangalore-560 057

Name of the Examiners

1. _____

2. _____

Signature with date

23/5/23

23/5/23

Principal
Sapthagiri College of Engineerin
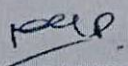14/5, Chikkasandra, Hesaraghatta Main Roa
Bengaluru - 560 057

SRI SRINIVASA EDUCATIONAL AND CHARITABLE TRUST®

SAPTHAGIRI COLLEGE OF ENGINEERING

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

(Accredited by NAAC with "A" grade) (NBA Accredited-CSE, ECE, EEE, ISE, ME)

(An ISO 9001:2015 & ISO 14001:2015 Certified)
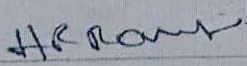
DEPARTMENT OF ISE

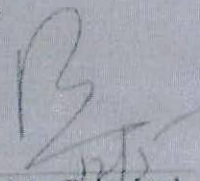## Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled "**Dynamic Cloud Resource Allocation Considering Demand Uncertainity**" carried out by **Ms. Rakshitha H (1SG19IS081), Ms. Rakshitha V (1SG19IS082), Ms. Surabhi M (1SG19IS107)** and **Ms. Swathi S (1SG19IS109)** bonafide students of 8th semester, Department of Information Science & Engineering was carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering in Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

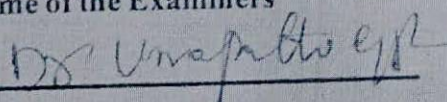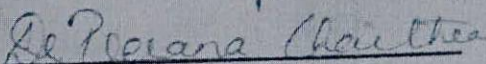Signature of the Guide

Prof. Nandini Gowda P
Assistant Professor

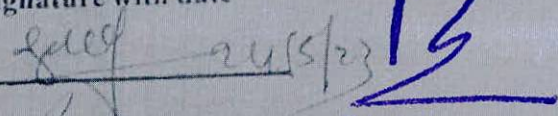Signature of the HOD

Dr. H.R. Ranganatha
Professor & Head

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

Name of the Examiners

Signature with date

1. Dr Unapathi g/R

2. Dr Prerana Chautha

24/5/23

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

Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled **"MYPASS: A SECURE PASSWORD MANAGER"** carried out by **Mr. Prabhat Shandilya (1SG19IS067), Mr. Rohit Kumar (1SG19IS085), Mr. Wamique Hashmi (1SG19IS121),** and **Mr. Zilie Hussaim (1SG19IS125),** bonafide students of 8th semester, Department of Information Science & Engineering was carried out at our college Sapthagiri College of **Engineering,** Bengaluru in partial fulfillment of the award of Bachelor of Engineering in **Information Science & Engineering** of the **Visvesvaraya Technological University,** Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Manasa _____
Signature of the Guide

HR Ray _____
Signature of the HOD

_____
Signature of the Principal

Prof. Manasa P. M.
Assistant Professor

Dr. H.R. Ranganatha
Professor & Head

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

Name of the Examiners

Signature with date

1. D Venupathi GP _____

2. De Peccana Chaithu _____

Department of Information Science & Engineering

CERTIFICATE

Certified that the Project Work Phase-2 (18ISP83) entitled "TALENT RECRUITMENT POSTING PREDICTION USING MACHINE LEARNING" carried out by Mr. Prajwash Dwivedi (1SG19IS016) and Ms. Sanjana Sinha (1SG19IS049), bonafide students of 8th semester, Department of Information Science & Engineering was carried out at our college Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering in Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Signature of the Guide

Prof. Chandrashekar CM
Assistant Professor

Signature of the HOD

Dr. H.R. Ranganatha
Professor & Head

Signature of the Principal

Dr. H Ramakrishna
Principal

Name of the Examiners

1. Dr. Umeshotta R

2. Dr. Prasanna Chatter

Signature with date

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

SAPTHAGIRI
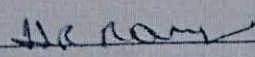College of Engineering
Creating Tomorrow

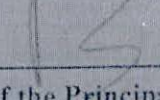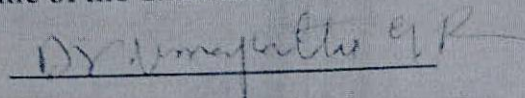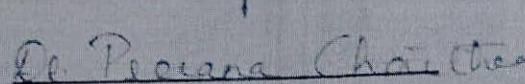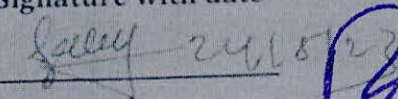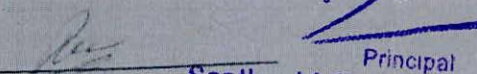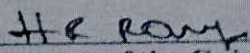## Department of Information Science & Engineering

CERTIFICATE

Certified that the Project Work Phase-2 (18CSP83) entitled Automated Agrobot For Smart Farming Using Ubiquitous Computing carried out by Mr. Pranav N (1SG19IS069), Mr. Rohith Ganapathi Bhat (1SG19IS086), Mr. S Kaushal (1SG19IS087), Mr. Nadeem Pasha (1SG19IS126) bonafide students of 8th semester, Department of Information Science & Engineering carried out at our college Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in Information Science & Engineering of the **Visvesvaraya Technological University,** Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

_____
Signature of the Guide

Prof. Swetha K B
Assistant Professor

_____
Signature of the HOD

Dr. H.R. Ranganatha
Professor & Head

_____
Signature of the Principal

Dr. H Ramakrishna
Principal

Name of the Examiners

1. _____

2. _____

Signature with date

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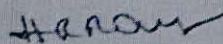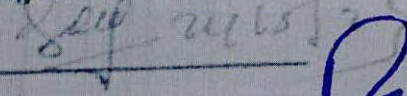14/5, Chikkasandra, Hesaraghatta Main Post
Bengaluru - 560

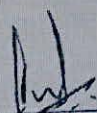# Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled Emotion Detection Analysis Using CNN Algorithm carried out by Mr. Prince Manani (1SG19IS073), Mr. Rohan R Vibhuti (1SG19IS083), Mr. Vikrant (1SG19IS119), Mr. Yogeeshwar P (1SG19IS124) bonafide students of 8th semester, Department of Information Science & Engineering carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in Information Science & Engineering of the **Visvesvaraya Technological University**, Belagavi during the year 2022-23. 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 Phase-2 prescribed for the said Degree.

Signature of the Guide	**Signature of the HOD**	**Signature of the Principal**
Dr. H R Ranganatha	Dr. H R Ranganatha	Dr. H Ramakrishna
HOD & Professor	HOD & Professor	Principal

Name of the Examiners

Signature with date

1.

2.

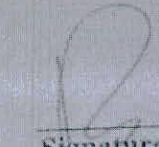## Department of Information Science & Engineering

CERTIFICATE

Certified that the **Project Work Phase-2 (18CSP83)** entitled Automatic Smart Voting System **Using Haar Cascade Algorithm** carried out by **Mr. Sarvajit Ashok Bhat (1SG19IS091)**, Mr. **Shashank K G (1SG19IS093)**, Ms. **Shivali B M (1SG19IS094)**, Mr. **Swaroop Chand J C (1SG19IS108)** bonafide students of 8th semester, Department of Information Science & Engineering carried out at our collegeSapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the Visvesvaraya **Technological University**, Belagavi during the year 2022-23. 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 academicrequirements in respect of Project work Phase-2 prescribed for the said Degree.
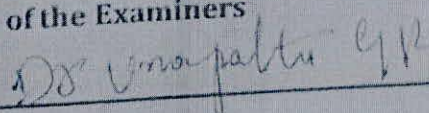
Signature of the Guide	Signature of the HOD	Signature of the Principal
Prof. Ramya R Assistant Professor	Dr. H R Ranganatha HOD & Professor	Dr. H Ramakrishna Principal Sapthagiri College of Enginee Chikkasandra, Hesaraghatta Ro Bangalore- 560 057

Signature with date

Name of the Examiners

1. _Dr Umapattu G R_

2. _Dr Poojana Chaithra_