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KLE TECHNOLOGICAL UNIVERSITY, HUBBALLI - 580031

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School of Computer Science and Engineering

CERTIFICATE

This is to certify that research on *"Weakly Supervised Visual Question Answer Generation"* is a bonafide work carried out by the student *A Naga Sai Charani, 01FE18BCS003*, in partial fulfillment of the award of Degree of Bachelor of Engineering in Computer Science during the year 2021 – 22. The research thesis has been approved as it satisfies the academic requirement with respect to the research work prescribed for the above said program.

Guide	HoS/H.O.D	Registrar

External Viva:

Name of Examiners	Signature
1. Dr. LAKSHMI PREYA (Chief Engineer @ SERB)	
2. Shankar G	

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BVB Campus, Vidyanagar, Hubballi – 580031, Karnataka, INDIA.

CERTIFICATE

This is to certify that research on Efficient Big data Storage and retrieval using IPFS and Blockchain ‖ is a bonafide work carried out by MARUTI ARER usn: 01FE18BCS111, in partial fulfillment of the award of Degree of Bachelor of Engineering in Computer Science and engineering during the year 2021-22. The research thesis has been approved as it satisfies the academic requirement with respect to the research work prescribed for the above said program.

Guide Name
Prof. Shashikumar G. Totad
Mr.Praveen M Dhulavvagol

SoCSE,

Head
Dr. Meena S. M.

External Viva-Voce

Name of the examiners	Signature with date
1 Dr. S. G. Totad	08/02/22
2 Dr. Milli Pant	* Exam Conducted Online

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SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

2021-22

CERTIFICATE

This is to certify that research entitled **"Performance Enhancement of Selective Search Technique using CoRe Algorithm"** is a bonafied work carried out by the **Nandan Bhandage (01FE18BCS122)**,in partial fulfillment of the completion of 7th semester B. E. course during the year 2021 – 2022. The research thesis has been approved as it satisfies the academic requirement with respect to the research work prescribed for the above said program.

Guide Name
Prof. S G Totad
Prof. Praveen M Dhulavvagol

SoCSE
Head
Dr. Meena S. M.

External Viva-Voce

Name of the examiners	Signature with date
1 Dr. S. G. Totad	08/2/22
2 Dr. Milli Pant	* Exam conducted online.

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CERTIFICATE

This is to certify that REU Project work titled "Spectral clustering based controller placement in SDN" is a bonafide work carried out by the Miss. Namrata K – 01FE18BCS120, in partial fulfillment of the completion of Seventh semester B. E. in Computer Science and Engineering during the year 2021 – 2022. The project report has been approved as it satisfies the academic requirement with respect to the project work prescribed for the above said programme.

Guide	Head, SoCSE	Registrar
Dr. Narayan D.G.	Dr. Meena S. M.	Dr N H Ayachit

External Viva-Voice

Name of the examiners	Signature with date
1 Tamal Das, IIT Dharwad	Online
2 Narayan D.G.	25/2/22

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CERTIFICATE

This is to certify that research on **"Person Re-Identification in Multi-Camera Setup"** is a bonafide work carried out by the student **Navdeep Singh Bagga(01FE18BCS127)**, in partial fulfillment of the award of Degree of Bachelor of Engineering in Computer Science and Engineering during the year 2021-22. The research thesis has been approved as it satisfies the academic requirement with respect to the research work prescribed for the above said program.

Guides
Dr. Sujatha C
Prof. Padmashree Desai

Head of School
Dr. Meena S M

External Viva-Voce:

Name of Examiners | Signature

1. Dr. Sujatha. C
2. Dr. S. R. Mahadeva Prasanna online exam
   Prof. IIT Dharwad

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KLE TECHNOLOGICAL UNIVERSITY, HUBBALLI - 580031

School Of Computer Science and Engineering

CERTIFICATE

This is to certify that research on *"3D Object Retrieval of Cultural Heritage"* is a bonafide work carried out by the student *Nihar Sunil Bagewadi*(01FE18BCS133), in partial fulfillment of the award of Degree of Bachelor of Engineering in Computer Science and Engineering during the year 2021 – 22. The research thesis has been approved as it satisfies the academic requirement with respect to the research work prescribed for the above said program.

Guide	HoS/H.O.D	Registrar

External Viva:

Name of Examiners	Signature
1. Dr. Lakshmi Priya (Chief Engineer @ SREB)	— Online
2. Shankar G	

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KLE TECHNOLOGICAL UNIVERSITY, HUBBALLI - 580031

School Of Computer Science and Engineering

CERTIFICATE

This is to certify that research on *"3D Object Retrieval of Cultural Heritage"* is a bonafide work carried out by the student *Nihar Sunil Bagewadi*(01FE18BCS133), in partial fulfillment of the award of Degree of Bachelor of Engineering in Computer Science and Engineering during the year 2021 – 22. The research thesis has been approved as it satisfies the academic requirement with respect to the research work prescribed for the above said program.

Guide	HoS/H.O.D	Registrar

External Viva:

Name of Examiners	Signature
1. Dr. Lakshmi Priya (Chief Engineer @ SREB) — Onli	
2. Shankar G	

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2021-22

CERTIFICATE

This is to certify that the REU project entitled "**Deep learning model for speech emotion detection based on GCI and GOI detection**" is a bonafied work carried out by the student **Omkar N Vernekar – 01FE18BCS139**, in partial fulfillment of the completion of 7th semester B.E. course during the year 2021 – 2022. The project report has been approved as it satisfies the academic requirement with respect to the project work prescribed for the above said course.

Guide

Dr. S. R. Nirmala, SoECE

Co-guide

Kavita Chachadi, SoEE

Head of Department

Dr. Meena S. M

REGISTRAR
KLE Technological University
HUBBALLI-580 031

External Viva-Voce

Name of the examiners	Signature with date
1 Dr. S R Nirmala, KLE Tech. Univ.	21/3/2022
2 Dr. Deepak. K. T, IIIT, Dharwad	ONLINE MODE

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CERTIFICATE

This is to certify that research on "**Person tracking in a multiple camera environment**" is a bonafide work carried out by Prashant Kumar (01FE18BCS150) in partial fulfillment of the award of Degree of Bachelor of Engineering in Computer Science and Engineering during the year 2021-22. The research thesis has been approved as it satisfies the academic requirement with respect to the research work prescribed for the above-mentioned program.

Guide(s)

Dr. Sujatha C

Prof. Padmashree Desai

Head of School

Dr. Meena S. M

External Viva-Voce:

Name of Examiner

Signature

1. Dr. Sujatha. C
2. Dr. S. R Mahadeva Prasanna Prof, IIT Dharwad — Online exam

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CERTIFICATE

This is to certify that Research Experience for Undergraduate Project entitled "Multi-Camera Multi Person Tracking" is a bonafied work carried out by the student (Pratik Ingale 01FE18BCS151), in partial fulfillment of the completion of 7th semester B. E. course during the year 2021 – 2022. The project report has been approved as it satisfies the academic requirement with respect to the project work prescribed for the above said course.

Guide Name
(Dr. Vishwanath P Baligar)

HOD SoCSE
(Dr. Meena S. M.)

(Prof. Prashant Narayankar)

External Viva-Voce

Name of the examiners	Signature with date
1 Dr. V. P. Baligar	27/6/22
2	

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2021-22

CERTIFICATE

This is to certify that project entitled "IMAGE CLASSIFICATION USING HYBRID-QUANTUM TRANFER LEARNING" is a bonafied work carried out by the student team Nidhi Anil Badiger - 01fe18bcs129, in partial fulfillment of the completion of 6th semester B. E. course during the year 2020 – 2021. The project report has been approved as it satisfies the academic requirement with respect to the project work prescribed for the above said course.

Guide Name
Dr.Satyadhyan Chickerur

SoCSE Head
Dr. Meena S. M.

External Viva-Voce

Name of the examiners	Signature with date
1 Dr. S. Chickerur	
2 Dr. Vijayraghavan	online

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CERTIFICATE

This is to certify that REU Project work titled "A Secure and an Efficient Consensus Algorithm for Blockchain Network using Game Theory" is a bonafide work carried out by the Mr. Naveen Kumar – 01FE19BCS426, in partial fulfillment of the completion of Seventh semester B. E. in Computer Science and Engineering during the year 2021 – 2022. The project report has been approved as it satisfies the academic requirement with respect to the project work prescribed for the above said programme.

Guide	Head, SoCSE	Registrar
Dr. Narayan D.G.	Dr. Meena S. M.	

External Viva-Voice

Name of the examiners	Signature with date
1 Tamal Das, IIT Dharwad	Online
2 Narayan D.G.	25/2/2022

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CERTIFICATE

This is to certify that REU Project work titled "QoS aware routing based on Deep Reinforcement Learning in Software Defined Networks" is a bonafide work carried out by the Mr. Jinesh Mehul Nagda – 01FE18BCS083, in partial fulfillment of the completion of Seventh semester B. E. in Computer Science and Engineering during the year 2021 – 2022. The project report has been approved as it satisfies the academic requirement with respect to the project work prescribed for the above said programme.

Guide	Head, SoCSE	Registrar
Dr. Sumedha Shinde	Dr. Meena S. M.	Dr N H Ayachit

External Viva-Voice

Name of the examiners	Signature with date
1 Pawan Das, IIT Dharwad	Online.
2 Narayan D.G.	25/2/22.

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School of Computer Science and Engineering

CERTIFICATE

This is to certify that research on *"COVID-19 detection from audio recordings"* is a bonafide work carried out by the student *Kaustubh R Borgavi* (01FE18BCS091), in partial fulfillment of the award of Degree of Bachelor of Engineering in Computer Science and Engineering during the year 2021 – 22. The research thesis has been approved as it satisfies the academic requirement with respect to the research work prescribed for the above said program.

Guide	HoS/H.O.D	Registrar

External Viva:

Name of Examiners	Signature
1. Dr. Lakshmi Priya (Chief Engg @ SRIB) — online	
2. Dr. Shankar G	

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CERTIFICATE

This is to certify that REU Project work titled "A collaborative approach to mitigate DDoS attacks using entropy and deep learning in SDN environment" is a bonafide work carried out by the Mr. Maltesh R. Kulkarni – 01FE18BCS110, in partial fulfillment of the completion of Seventh semester B. E. in Computer Science and Engineering during the year 2021 – 2022. The project report has been approved as it satisfies the academic requirement with respect to the project work prescribed for the above said programme.

Guide	Head, SoCSE	Registrar
Dr. Narayan D.G.	Dr. Meena S. M.	Dr N H Ayachit

External Viva-Voice

Name of the examiners	Signature with date
1 Tamal Das, IIT Dharwad	Online
2 Narayan D.G.	25/2/22

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CERTIFICATE

This is to certify that research on Comparative analysis of optimization Techniques on Multi-class SVM is a bonafide work carried out by NEHA DESHPANDE USN :01FE18BCS128, in partial fulfillment of the award of Degree of Bachelor of Engineering in Computer Science and engineering during the year 2021-22. The research thesis has been approved as it satisfies the academic requirement with respect to the research work prescribed for the above said program.

Guide Name
Prof. Karibasappa K. G
Prof. Shashikumar G Totad

SoCSE,

Head
Dr. Meena S. M.

External Viva-Voce

Name of the examiners	Signature with date
1 Prof. Karibasappa K. G	12/2/22
2 Dr. Manish Okade	Exam Conducted online

KLE Society's
KLE Technological University, Hubballi.

2021 - 2022

KLE TECH.

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SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that Research Experience Undergraduate project titled "Diabetic Retinopathy QT-Classification" is a bonafied work carried out by the student Vishal Narasapur (01FE18BCS260) for partial fulfillment of completion of seventh semester B.E. in Computer Science and Engineering during the academic year 2021-22. The project report has been approved as it satisfies the academic requirement with respect to the project work prescribed for the above said course.

Guide

Dr. Satyadhyan Chickerur

Head, SoCSE

Dr. Meena S. M

Viva -Voce:

Name of the Examiners	Signature with date
1. Dr. S. Chickerur	
2. Dr. Vijayaraghavan	online

KLE Society's
KLE Technological University Hubballi-580031

KLE TECH

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SCHOOL OF COMPUTER SCIENCE & ENGINEERING

CERTIFICATE

This is to certify that research on "**QoE Aware Video Adaptation for Video Streaming in 5G Networks** " is a bonafide work carried out by the student **Aditi Hegde**, in partial fulfillment of the award of Degree of Bachelor of Engineering in Computer Science and Engineering during the year 2021-2022. The research thesis has been approved as it satisfies the academic requirement with respect to the research work prescribed for the above said program.

Guides	Head of SoCSE	Registrar
Dr. Vijayalakshmi M 12/2/22	Dr. Meena S. M	Dr. N.H Ayachit
Dr. Jayalaxmi G.N. 12/2/22		

External Viva:

Name of the Examiners	Signature with date
1. Jayalaxmi G N.	12/2/22
2. Rahul Thakur	

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KLE TECH

BVB Campus, Vidyanagar, Hubballi – 580031, Karnataka, INDIA.

2021-22

CERTIFICATE

This is to certify that REU project titled "Sentiment Analysis using Variational Quantum Circuit" is a bonafied work carried out by the student Abhishek Saurabh, 01FE18BCS012 in partial fulfillment of the completion of 7th semester B. E. course during the year 2021–2022. The project report has been approved as it satisfies the academic requirement with respect to the project work prescribed for the above said course.

Guide Name
(Mr. Satyadhan Chickerur)

SoCSE
Head,
Dr. Meena S. M.

External Viva-Voce

Name of the examiners	Signature with date
1 Dr. S. chickerur	
2 Dr. Vijayraghavan	online

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BVB Campus, Vidyanagar, Hubballi – 580031, Karnataka, INDIA.

CERTIFICATE

This is to certify that Research on "Text Sentiment Analysis Based on Multichannel Convolutional Neural Networks and Syntactic Structure" is a bonafied work carried out by the student **Debabrata Maity(01FE18BCS068)** in partial fulfillment of the award of Degree of Bachelor of Engineering in Computer Science and engineering during the year 2021 – 2022. The research thesis has been approved as it satisfies the academic requirement with respect to the research work prescribed for the above said program.

Dr. Suvarna Kanakaraddi, Dr. Shantala Giraddi
Guide

Dr. Meena S. M.
Head SoCSE

External Viva-Voce

Name of the examiners | Signature with date

1 Dr. Suvarna G. Kanakaraddi

2 Dr. Mahadev Prasanna. online mode.