SAPTHAGIRI COLLEGE OF ENGINEERING
(Affiliated to VTU, Belagavi and Approved by AICTE, New Delhi)
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
ISO 9001: 2015 & ISO 14001: 2015 CERTIFIED
AY:2020-21
MINI PROJECT BATCH LIST - 6 A & B SECTION - AY 2020-21(18ECMP68)

SL.	BAT	USN	STUDENT NAME	MINI PROJECT TITLE	INTERNAL GUIDE
1		1SG18EC001	Abhishek R	IR Home Automation	Dr. H C Sateesh Kumar
2		1SG18EC003	Akarsh B A		
3		1SG18EC012	Ashwin k		
4	1	1SG18EC057	MEDA ABHIRAM SA		
5		1SG18EC063	Nithin R S		
6		1SG18EC108	Ullas H P		
7		1SG18EC111	Vandana G		
8	2	1SG18EC117	Vinay H S	Car Parking System using Arduino	Dr. Prakash Jadhav
9		1SG18EC023	Deepa B 3		
10		1SG18EC037	Harshitha V 2		
11		1SG18EC049	Lavanya N 1		
12	3	1SG18EC058	Megha S	Currency converter using PYTHON	Prof. Agalya S
13		1SG18EC062	Nikhil Umapati		
14		1SG18EC074	Prateek. J. H	VOICE CONTROLLED ROBOT USING ARDUINO UNO	Prof. Ravishakara M N
15	4	1SG18EC105	Tarun Kumar. G		
16		1SG18EC083	Reshma S Hegde		
17		1SG18EC113	Varun L		
18		1SG18EC086	Sakshi Pai	IOT Based Temparature control and Monitoring System	Prof. Shobha S
19	5	1SG18EC071	Prajwal P		
20		1SG18EC068	POOJA G D		
21		1SG18EC096	SHILPASHREE S R		
22		1SG18EC098	SHRADDHA VARIJ		
23	6	1SG18EC080	RAKSHITH G S	BILLING SYSTEM USING PYTHON	Dr.Sudha M S
24		1SG18EC009	Arathi M		
25		1SG18EC045	Khushi Singh		
26		1SG18EC048	Lavanya B	Fake news detection using Python and Machine learning	Prof. Suma V Shetty
27	7	1SG18EC055	Manasa Dev G J		
28		1SG18EC060	Nagesh R Shanbha		
29		1SG18EC041	Jayanath K Holalke		
30		1SG18EC056	Manoj Biradar	Face shape detection using python and CNN	Prof. Shobha S
31	8	1SG18EC054	Akshay Kamath		
32		1SG18EC035	Hamsitha B		
33		1SG18EC053	Likhitha G	Wireless noticeboard using Bluetooth module	Prof. Shilpa V
34	9	1SG18EC059	Monisha R		
35		1SG18EC077	Preksha Prakash		
36		1SG18EC079	R Divya		
37	10	1SG18EC095	Shilpa A	Currency converter using Python	Prof. Kavitha R J
38		1SG18EC061	Nikhil M Kumar		
39		1SG19EC414	Rakshith D		

#	Grp	USN	Name	Project Title	Guide
40	11	1SG18EC094	Shashank S	Weather Forecasting using Python	Prof. Prathibha P
41		1SG19EC418	Yashwanth Kumar		
42		1SG19EC404	Darshan Gowda S		
43		1SG19EC407	Doreswamy V B		
44	12	1SG19EC408	Harsha Vardhana K	Smart Irrigation System	Prof. Girish J R
45		1SG18EC070	Prajwal J badiger		
46		1SG18EC073	Pramodh N		
47		1SG18EC076	Praveen N		
48	13	1SG18EC085	Saikrishna M	COVID 19 heat map using Python	Prof. Preethi T S
49		1SG18EC102	Sujan S		
50		1SG18EC118	Vinay p		
51		1SG18EC119	Vinay prasad M		
52	14	1SG18EC116	Vikas B S	Real time Weather Application using python	Prof. Madhu H M
53		1SG18EC115	Vidya K N		
54		1SG18EC103	Suma G		
55	15	1SG18EC082	Rakshitha S Achary	Django Ecommerce Website (Framework)	Prof. Vinay H C
56		1SG18EC007	Apoorva Y J		
57		1SG18EC002	Aishwarya katare		
58		1SG18EC018	Ceriya deepika		
59	16	1SG18EC010	Archana.D	password door lock using arduino	Prof. Varshini K
60		1SG18EC008	Apurva M Shet		
61		1SG18EC020	Chandana V		
62		1SG18EC025	Deepika U.M		
63	17	1SG18EC031	G. Meghashree	IMAGE PROCESSING USING OPEN CV	Prof. Suma C
64		1SG18EC044	K SHREYAS		
65		1SG18EC042	JAYANTH R S		
66		1SG18EC036	HARE KRISHNA		
67	18	1SG18EC039	HEMANTH K	Bidirectional Visitor Counter	Prof. Padmavathi C
68		1SG18EC090	SELVA KUMAR B		
69		1SG18EC091	SHARATH K V		
70	19	1SG18EC097	SHIVA KUMAR S	Optical Communication	Prof. Rashmi B J
71		1SG18EC027	Dhanushree L		
72		1SG18EC050	Lavanya R		
73	20	1SG18EC017	Bhumika S	Four Lane Traffic Control System using Arduino	Prof. Kavitha R J
74		1SG18EC087	Samarth.K		
75		1SG18EC078	Premsagar.B.L		
76		1SG18EC106	Thejas.S		
77	21	1SG18EC100	Shreyas.S	Home automation using Arduino Uno and Bluetooth	Prof. Shobha H
78		1SG18EC030	DUSHYANTH H Y		
79		1SG18EC028	DIVAKAR V		
80		1SG18EC034	GIREESHA K		
81	22	1SG18EC032	GANGADHAR GM	Hand Number sign recognition using python	Prof. Suma V Shetty
82		1SG18EC013	ASHWINI B N		
83		1SG18EC016	BHARGAVI TC		
84	23	1SG18EC019	CHANDANA C B	QR and barcode scanner /Reader	Prof. Shilpa V
85		1SG18EC069	POOJITHA S B		
86		1SG18EC099	SHREYA S		
87	24	1SG18EC110	VAISHNAVI P B	Conversion of Text to Speech and Sppech to Text using python	Prof. Kavitha R J

88		1SG18EC088	Samreen Kausar		
89		1SG18EC109	Ume E Safa		
90		1SG18EC112	Varshini R		
91	25	1SG19EC401	Asha KR	Ultrasonic Distance measurement using Siimulation	Prof. Prathibha P
92		1sg18ec021	Chetan B A		
93		1sg18ec040	Jashvanth V		
94		1sg18ec014	Bharath K		
95	26	1sg18ec022	Darshan J	Real Time Chat Application	Prof. Girish J R
96		1SG18EC104	Swagat Shreyash	TYPING SPEED TEST USING PYTHON	
97	27	1SG18EC101	Sourav Kumar Sin		Prof. Vinay H C
98		1SG18EC065	R Nitish		
99		1SG17EC117	Harsha R.L		
100		1SG18EC107	Ujwal.S		
101	28	1SG18EC067	Pavan.Kumar.G.V	Colour Detaction using Python	Prof. Preethi T S
102		1SG18EC005	Anand.v		
103		1SG18EC047	Kumar.g	Home automation using arduino and Bluetooth	
	29				Prof. Suma C
104		1SG19EC400	Amulya N D		
105		1SG19EC406	Divya R		
106		1SG18EC411	Meghana		
107	30	1SG19EC417	Thanuja L	Automatic car wiper using Arduino and Rain Sensor	Prof. Madhu H M
108		1SG18EC024	Deepak K		
109		1SG18EC038	Hemanth H m		
110		1SG18EC051	L vishnu vardhan re		
111	31	1SG18EC015	Bharath K	Three way Traffic Light Control System	Prof. Varshini K
112		1SG19EC410	Manu K M		
113		1SG19EC413	Prathap B R		
114	32	1SG18EC122	Yogeesh Y R	Banking Application Using Java	Prof. Padmavathi C
115		1SG19EC405	Deepak N		
116		1SG19EC409	Imdad hussain		
117		1SG19EC412	Naveen H R		
118	33	1SG19EC415	Ranganath M	Virtual Assistant Using Python	Prof. Rashmi B J
119		1SG19EC403	Chaitanya DR		
120		1SG19EC402	Bindu MG		
121	34	1SG18EC066	Parvathy R	Elevator with load limit detection	Prof.Vinay H C
122		1SG18EC093	Shashank DR		
123		1SG18EC092	Sharath Kumar BG		
124	35	1SG18EC120	Vishal N	Pathfinder using python	Prof.Suma C
125		1SG18EC006	Ananya N Yadav		
126		1SG18EC011	Archana H K		
127	36	1SG18EC033	Geetha N P	Arduino controlled DC motor driver	Prof.Ravishankara M N
128		1SG18EC046	Kiran Kumar D		
129		1SG18EC043	Teja K R		
130	37	1SG18EC026	Devankit	Graphical implementation of Helicopter	Dr.Sudha M S

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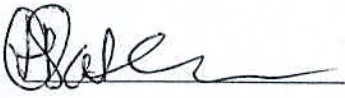## Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the Mini Project work entitled **IR Home Automation** is a bonafide work carried out by

Abhishek R	1SG18EC001
Akarsh B A	1SG18EC003
Ashwin K	1SG18EC012
Meda Abhiram Sai	1SG18EC057

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of Mini Project work prescribed for the degree.

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Head of the Department

Dr. H Ramakrishna

Principal

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CERTIFICATE

This is to certify that the mini project work entitled **Car parking system using Arduino** is a bonafide work carried out by

Nithin R S	1SG18EC063
Ullas H P	1SG18EC108
Vandana G	1SG18EC111
Vinay H S	1SG18EC117

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of mini project work prescribed for the degree.

Dr. Prakash Jadhav

Guide

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Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the Mini Project work entitled **Currency Converter using Python** is a bonafide work carried out by

Deepa B	1SG18EC023
Harshitha V	1SG18EC037
Lavanya N	1SG18EC049
Megha S	1SG18EC058

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of Mini Project work prescribed for the degree.

Agalya P

Associate Professor

Dr. H C Sateesh Kumar

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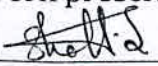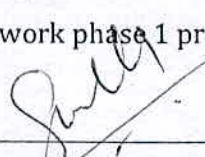## Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **Voice Controlled Robot using Arduino** is a bona-fide work carried out by

Nikhil Umapati	1SG18EC062
Prateek J H	1SG18EC074
Tarun Kumar G	1SG18EC105

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work prescribed for the degree.

Ravi Shankara. M. N
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Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **IOT Based Temperature Control and Monitoring System** is a bonafide work carried out by

Prajwal P	1SG18EC071
Reshma S Hegde	1SG18EC083
Sakshi Pai B	1SG18EC086
Varun L	1SG18EC113

in partial fulfilment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work prescribed for the degree.

Mrs. Shobha S	Dr. H C Sateesh Kumar	Dr. H Ramakrishna
Guide	Head of the Department	Principal

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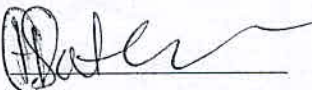## Department of Electronics & Communication Engineering

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This is to certify that the project work entitled **Billing System Using Python** is a bona-fide work carried out by

Shraddha varijaksha	1SG18EC098
Shilpashree S R	1SG18EC096
Pooja G D	1SG18EC068
Rakshith G S	1SG18EC080

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work phase 1 prescribed for the degree.

Dr. Sudha M S
Guide

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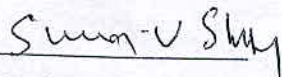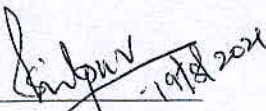## Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the Mini Project work entitled **Fake News Detection with Python and Machine Learning** is a bonafide work carried out by

Arathi M	1SG18EC009
Khushi Singh	1SG18EC045
Lavanya B	1SG18EC048
Manasa Dev G J	1SG18EC055

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Prof. Suma V Shetty

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Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the Mini Project work entitled **Face Shape Detector using Python and CNN** is a bonafide work carried out by

M Akshay Kamath	1SG18EC054
Jayanth K Holalkeri	1SG18EC041
Manoj Mahadev Biradar	1SG18EC056
Nagesh R Shanbhag	1SG18EC060

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of Mini Project work prescribed for the degree.

Prof. Shobha S

Associate Professor

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Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the Mini Project work entitled "**Wireless notice board using Bluetooth module**" is a bonafide work carried out by
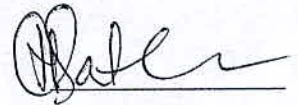
Hamsitha B	1SG18EC035
Likhitha G	1SG18EC053
Monisha R	1SG18EC059

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of Mini Project work prescribed for the degree.

Prof. Shilpa V.
Guide

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Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the Mini Project work entitled **Currency Convertor using Python** is a bonafide work carried out by

Preksha Prakash	1SG18EC077
R Divya	1SG18EC079
Shilpa A	1SG18EC095

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of Mini Project work prescribed for the sixth Semester.

Prof. Kavithá RJ   Dr. H C Sateesh Kumar   Dr. H Ramakrishna

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Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **Weather Forecasting Using Python** is a bonafide work carried out by

Nikhil M Kumar	1SG18EC061
Shashank S	1SG18EC094
Rakshith D	1SG19EC414

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work phase 1 prescribed for the degree.

Prof.Prathibha P

Guide

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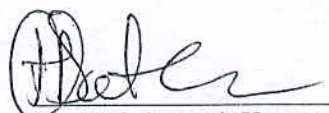## Department of Electronics & Communication Engineering

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This is to certify that the Mini Project work entitled **SMART IRRIGATION SYSTEM** is a bona fide work carried out by

DARSHAN GOWDA S	1SG19EC404
DORESWAMY VB	1SG19EC407
HARSHA VARDHANA KV	1SG19EC408
YASHWANTH KUMAR M	1SG19EC418

In partial fulfilment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of Mini Project work prescribed for the degree.

J R GIRISH
Guide

Dr. H C Sateesh Kumar
Head of the Department

Dr. H Ramakrishna
Principal

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Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **COVID-19 WORLD HEAT MAP USING PYTHON** is a bonafide work carried out by

Prajwal J Badiger	1SG18EC070
Pramodh N	1SG18EC073
Praveen N	1SG18EC076
Sai Krishna M	1SG18EC085

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work phase 1 prescribed for the degree.

Prof. Preethi T S

Assistant Professor

Dr. H C Sateesh Kumar

Head of the Department

Dr. H Ramakrishna

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CERTIFICATE

This is to certify that the project work entitled **REAL TIME WEATHER APPLICATION USING PYTHON** is a bonafide work carried out by

Vinay P	1SG18EC118
Vinay Prasad M	1SG18EC119
Sujan S	1SG18EC102
Vikas B S	1SG18EC116

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagaviduring the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work phase 1 prescribed for the degree.

Prof. Madhu HM	Dr. H C Sateesh Kumar	Dr. H Ramakrishna
Assistant Professor	Head of the Department	Principal

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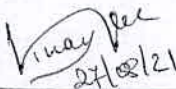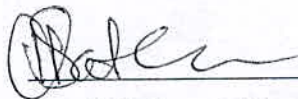## CERTIFICATE

This is to certify that the Mini project work entitled **DJANGO E-COMMERCE WEBSITE(FRAMEWORK)** is a bonafide work carried out by

Rakshitha S Acharya	1SG18EC082
Suma G	1SG18EC103
Vidya K N	1SG18EC115

in partial fulfilment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of mini project work prescribed for the degree.

Prof. Vinay H C
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2020-2021

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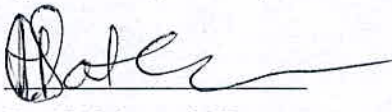
Department of Electronics & Communication Engineering

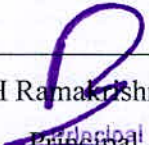
CERTIFICATE

This is to certify that the project work entitled **Password Door Lock Using Arduino** is a bonafide work carried out by

Archana D	1SG18EC010
Aishwarya Katare	1SG18EC002
Apoorva Y J	1SG18EC007

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work phase 1 prescribed for the degree.

Prof. Varshini K	Dr. H C Sateesh Kumar	Dr. H Ramakrishna
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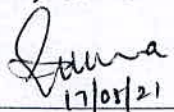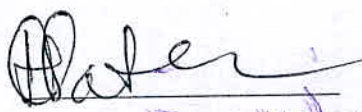
Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the Mini Project work entitled **Image Processing Using Open CV** is a bonafide work carried out by

Apurva M Shet	1SG18EC008
Chandana V	1SG18EC020
Deepika U.M	1SG18EC025
G.Meghashree	1SG18EC031

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17/05/21

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CERTIFICATE

This is to certify that the mini project work entitled **BIDIRECTIONAL VISITOR COUNTER** is a bonafide work carried out by

Hare Krishna	1SG18EC036
Hemanth. K	1SG18EC039
Jayanth. R. S	1SG18EC042
K. Shreyas	1SG18EC044

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Padmavathi. C

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Dr. H Ramakrishna

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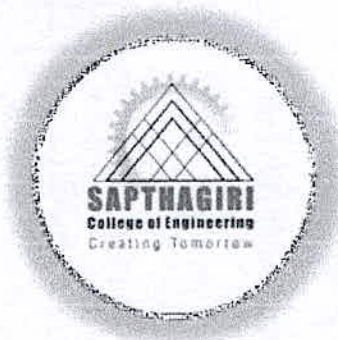14/5, Chikkasandra, Hesaraghatta Main Road
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CERTIFICATE

This is to certify that the Mini Project work entitled OPTICAL COMMUNICATION is a bonafide work carried out by

Shiva Kumar S	1SG18EC097
Sharath KV	1SG18EC091
Selva Kumar B	1SG18EC090

in partial fulfillment for the award of degree of **Bachelor of Engineering in Electronics & Communication Engineering** of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of Mini Project work prescribed for the degree.

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Department of Electronics & Communication Engineering

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CERTIFICATE

This is to certify that the project work entitled **FOUR LANE TRAFFIC CONTROL SYSTEM** is a bonafide work carried out by

DHANUSHREE.L	1SG18EC027
LAVANYA.R	1SG18EC050

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of mini project work prescribed for the degree.

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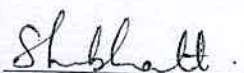## Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the project work entitled **Home Automation using Arduino Uno and Bluetooth Module** is a bona fide work carried out by

Premsagar B L	USN 1SG18EC078
Samarth K	USN 1SG18EC087
Shreyas S	USN 1SG18EC100
Thejas S	USN 1SG18EC106

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Shobha H	Dr. H C Sateesh Kumar	Dr. H Ramakrishna
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Department of Electronics & Communication Engineering

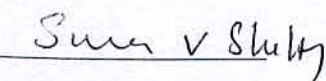

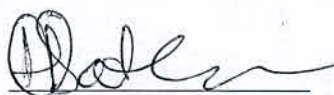SAPTHAGIRI
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CERTIFICATE

This is to certify that the Mini Project work entitled **Hand Number Sign Recognition Using Python** is a bonafide work carried out by,

DIVAKAR V	1SG18EC028
DUSHYANTH H Y	1SG18EC030
GANGADHAR G M	1SG18EC032
GIREESHA K	1SG18EC034

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of Mini Project work prescribed for the degree.

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Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the Mini Project work entitled **QR And Bar Code Scanner/Reader** is a bonafide work carried out by

Ashwini B N	1SG18EC013
Bhargavi T C	1SG18EC016
Chandana C B	1SG18EC019

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CERTIFICATE

This is to certify that the Mini Project work entitled **Conversion of text to speech and speech to text using python** is a bonafide work carried out by
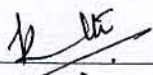
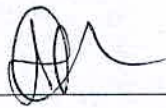|	
POOJITHA S B	1SG18EC069
SHREYA S	1SG18EC099
VAISHNAVI P B	1SG18EC110

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CERTIFICATE

This is to certify that the Mini Project work entitled **ULTRASONIC DISTANCE MESUREMENT USING SIMULATION** is a bonafide work carried out by

Asha K R	1SG19EC401
Samreen kausar	1SG18EC088
Ume e safa	1SG18EC109
Varshini R	1SG18EC112

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CERTIFICATE

This is to certify that the Mini Project work entitled **Real Time Chat Application**
is a bonafide work carried out by

Bharath K [1SG18EC014]

Chetan B A [1SG18EC021]

Darshan J [1SG18EC022]

Jashwanth V[1SG18EC040]

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of Mini Project work prescribed for the degree.

Prof. J R Girish

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELAGAVI – 590 018

A Mini Project report
On

Battery Level Indicator Circuit Using LM3914IC

Submitted During V Semester

BACHELOR OF ENGINEERING
in
ELECTRONICS & COMMUNICATION ENGINEERING

under the guidance of

PROF. SHOBHA S
ASSISTANT PROFESSOR

Student Name	USN	Creativity (10)	Implementation (10)	Report (05)	Total (25)
Swagat Shreyash	1SG18EC104	10	10	5	25
Sourav Singh	1SG18EC101	10	10	5	25

_____
Signature of the Guide
Guide Name

_____
Signature of the HOD
Dr. H.C. Sateesh Kumar

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
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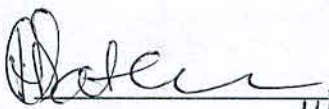## Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the Mini Project work entitled **Color Detection Using Python** is a bonafide work carried out by

NITISH R	1SG18ECO65
HARSHA RL	1SG17EC117
PAVAN KUMAR GV	1SG18EC067
UJWAL S	1SG18EC107

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CERTIFICATE

This is to certify that the project work entitled **HOME AUTOMATION USING ARDUINO AND BLUETOOTH** is a bonafide work carried out by

Anand V	1SG18EC005
Kumar G	1SG18EC047

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of project work phase 1 prescribed for the degree.

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Assistant Professor

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CERTIFICATE

This is to certify that the Mini Project work entitled **AUTOMATIC CAR WIPER USING ARDUINO AND RAIN SENSOR** is a bonafide work carried out by

AMULYA N D	1SG19EC400
DIVYA R	1SG19EC406
MEGHANA	1SG19EC411
THANUJA L	1SG19EC417

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Prof. Madhu H M

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CERTIFICATE

This is to certify that the Mini Project work entitled **Three Way Traffic Light Control System** is a bonafide work carried out by

Hemanth H M	1SG18EC038
Deepak K	1SG18EC024
Vishnu Vardhan Reddy L	1SG18EC051
Bharath K	1SG18EC015

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Prof. Varshini K

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This is to certify that the Mini Project work entitled **BANKING APPLICATION USING JAVA** is a bonafide work carried out by

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Prathap B R	1SG19EC413
Yogeesh Y R	1SG18EC122

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Padmavathi C

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CERTIFICATE

This is to certify that the Mini Project work entitled **VIRTUAL ASSISTANT USING PYTHON** is a bonafide work carried out by

Deepak N	1SG19EC405
Imdad Hussain	1SG19EC409
Naveen HR	1SG19EC412
Ranganath M	1SG19EC415

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of Mini Project work prescribed for the degree.

Prof. Rashmi BJ

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Department of Electronics & Communication Engineering

CERTIFICATE

This is to certify that the Mini Project work entitled **ELEVATOR WITH LOAD LIMIT DETECTION** is a bonafide work carried out by
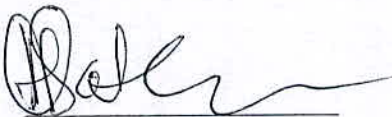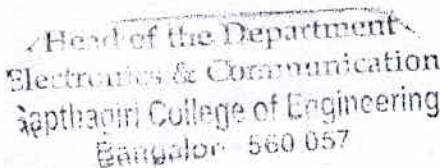
PARVATHY R	1SG18EC066
BINDU SHREE M G	1SG19EC402
CHAITHANYA DR	1SG19EC403

In partial fulfilment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of VTU , Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of Mini Project work prescribed for the degree.

Prof.Vinay H C

Guide

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Head of the Department

Dr. H Ramakrishna

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Department of Electronics & Communication Engineering

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Creating Tomorrow

CERTIFICATE

This is to certify that the Mini Project work entitled **A* PATHFINDER Using Python** is a bonafide work carried out by,

SHARATH KUMAR BG	1SG18EC092
SHASHANK D R	1SG18EC093
VISHAL N	1SG18EC120

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Prof. Suma C

Assistant Professor

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CERTIFICATE

This is to certify that the Mini Project work entitled **ARDUINO CONTROLLED DC MOTOR DRIVER** is a bonafide work carried out by

Ananya N Yadav	1SG18EC006
Archana H K	1SG18EC011
Geetha N P	1SG18EC033

in partial fulfillment for the award of degree of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of Mini Project work prescribed for the degree.

Prof. Ravishankara M N

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CERTIFICATE

This is to certify that the Mini Project work entitled **Graphical implementation of Helicopter** is a bonafide work carried out by

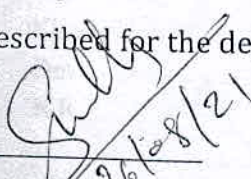|	
KIRAN KUMAR D	1SG18EC046
DEVANKIT	1SG18EC026
K R TEJA	1SG18EC043

in partial fulfillment for the award of degree. of *Bachelor of Engineering in Electronics & Communication Engineering* of Visvesvaraya Technological University, Belagavi during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement in respect of Mini Project work prescribed for the degree.

Dr. Sudha M S

Assistant Professor

Dr. H C Sateesh Kumar

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