### **List of Project Session 2021-22**

Sr. No.	Roll No.	Name of Student	Topic of Project	Project guide
1	170102018	MOHD. ASIF	Efficacy of sustainable concrete made of Bagasse ash	Dr. Kavita Tandon
2	170102022	PRASHANT TIWARI	A study of technical and environmental feasibility of fly ash bricks	Mr. Prithvipati
3	180102001	AKANKSHA PAL	A study on usage and efficacy of facemask during Covid	Prof. Dipteek Parmar
4	180102002	AMAN KUMAR	A study on usage and efficacy of facemask during Covid	Prof. Dipteek Parmar
5	180102003	AASTHA OMAR	Soil Stabilization using coir fibre	Mr. Manish Kumar
6	180102004	ABHAY PATEL	A study on usage and efficacy of facemask during Covid	Prof. Dipteek Parmar
7	180102005	ABHINAV GUPTA	Analyzing the effects of particulate matter in Kanpur city	Dr. Rajiv Ganguly
8	180102006	ABHISHEK CHOUDHARY	Design of RCC circular overhead tank	Prof. Sunil Kumar
9	180102007	ABHISHEK KUMAR CHAUDHARY	Efficacy of sustainable concrete made of Bagasse ash	Dr. Kavita Tandon
10	180102008	APOORV SINGH	Soil Stabilization using coir fibre	Mr. Manish Kumar
11	180102009	ARYAMAN SINGH	A study of technical and environmental feasibility of fly ash bricks	Mr. Prithvipati
12	180102010	ASHISH TRIVEDI	Traffic signal design using green flow algorithms	Prof. Pradeep Kumar
13	180102011	ASHTABHUJA YADAV	Design of RCC circular overhead tank	Prof. Sunil Kumar
14	180102012	BALWANT KUMAR YADAV	Analyzing the effects of particulate matter in Kanpur city	Dr. Rajiv Ganguly
15	180102013	DIVYANSH YADAV	Analyzing the effects of particulate matter in Kanpur city	Dr. Rajiv Ganguly
16	180102014	HARSH VERMA	Statistical analysis and determination of water quality index	Dr. Deepesh Singh
17	180102015	HIMANSHU SINGH	A study of technical and environmental feasibility of fly ash bricks	Mr. Prithvipati
18	180102016	JANVI SINGH	A study on usage and efficacy of facemask during Covid	Prof. Dipteek Parmar
19	180102017	JIGYASA SHARMA	Statistical analysis and determination of water quality index	Dr. Deepesh Singh
20	180102018	PANKAJ KUMAR	Traffic signal design using green flow algorithms	Prof. Pradeep Kumar
21	180102019	PRANAV RAI	Design of RCC circular overhead tank	Prof. Sunil Kumar
22	180102020	RAHUL VERMA	Design of RCC circular overhead tank	Prof. Sunil Kumar
23	180102021	RHYTHM DUBEY	Statistical analysis and determination of water quality index	Dr. Deepesh Singh
24	180102022	SACHIN KUMAR RISHI	Efficacy of sustainable concrete made of Bagasse ash	Dr. Kavita Tandon
25	180102023	SALONI MISHRA	Statistical analysis and determination of water quality index	Dr. Deepesh Singh

26	180102024	SANDEEP KESHARI	A study of technical and environmental feasibility of fly ash bricks	Mr. Prithvipati
27	180102025	SIDHARTH SHUKLA	Analyzing the effects of particulate matter in Kanpur city	Dr. Rajiv Ganguly
28	180102026	SOURABH YADAV	Traffic signal design using green flow algorithms	Prof. Pradeep Kumar
29	180102027	SUBHASH KUMAR RANA	Soil Stabilization using coir fibre	Mr. Manish Kumar
30	180102028	UJJWAL SINGH	Soil Stabilization using coir fibre	Mr. Manish Kumar
31	180102029	VIKRANT SRIVASTAVA	A study of technical and environmental feasibility of fly ash bricks	Mr. Prithvipati
32	180102030	YUVRAJ PAL	Traffic signal design using green flow algorithms	Prof. Pradeep Kumar
33	180102031	AKANKSHA VERMA	Efficacy of sustainable concrete made of Bagasse ash	Dr. Kavita Tandon

(Anand Kumar)
Dean of Academic Affairs

# A STUDY ON USAGE AND EFFICACY OF FACEMASK DURING COVID

Submitted by

AKANKSHA PAL (180102001)

AMAN KUMAR (180102002)

ABHAY PATEL (180102004)

JANVI SINGH (180102016)



Department of Civil Engineering
HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

Kanpur-208002

July, 2022

DMI NOTE 10 PRO । -अमन

# A STUDY ON USAGE AND EFFICACY OF FACEMASK DURING COVID

Submitted in partial fulfilment for award of the degree

of

BACHELOR OF TECHNOLOGY in Civil Engineering

by

AKANKSHA PAL (180102001) AMAN KUMAR (180102002) ABHAY PATEL (180102004) JANVI SINGH (180102016)

Under the Supervision of

Dr. DIPTEEK PARMAR

Professor & Head



Department of Civil Engineering

HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

Kanpur-208002

July, 2022

This is to certified that Akanksha Pal (180102001), Aman Kumar (180102002), Abhay Patel (180102004), Janvi Singh (180102016) have carried out their B.Tech project titled as "A study on usage and efficacy of facemask during COVID" presented in this report for the award of Bachelor of Technology in Civil Engineering from Harcourt Butler Technical University, Kanpur under my supervision during the period 2021-2022. The report embodies results of original work carried out by these students and the contents of this study have not been presented anywhere for the award of any other degree/diploma.

Date: 20 7 22

(Dipteek Parmar)

Professor & Head Civil Engineering Department H.B.T.U, Kanpur

## ACKNOWLEDGEMENTS

We wish to affirm our earnest acknowledgement and deepest gratitude to our supervisor Dr. Dipteek Parmar, Professor, Department of Civil Engineering, HBTU, Kanpur, India for introducing the present topic, his intuitive and meticulous guidance, constructive criticism, valuable suggestion and perpetual inspiration in completion of this report. We are highly thankful to him for devoting his valuable time despite his busy schedule. We would also like to express our gratitude to our parents and friends for their kind

cooperation, encouragement, motivation and inspiration have always provided us with high mental support and contributed in all possible ways, in completion of this report.

Date:13.07.2022

(Akanksha Pal) Roll No. 180102001

(Aman Kumar)
Roll No. 180102002

Abhay Patel. (Abhay Patel) Roll No. 180102004

Janvi Singh (Janvi Singh) Roll No. 180102016

# ANALYSING THE EFFECTS OF PARTICULATE MATTER IN KANPUR CITY

by

DIVYANSH YADAV (180102013)
BALWANT KUMAR YADAV (180102012)
ABHINAV GUPTA (180102005)
SIDHARTH SHUKLA (180102025)



Department of Civil Engineering
HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

Kanpur-208002 July, 2022

# ANALYSING THE EFFECTS OF PARTICULATE MATTER IN KANPUR CITY

Submitted in partial fulfilment for award of the degree

of

BACHELOR OF TECHNOLOGY
in
Civil Engineering

by

DIVYANSH YADAV (180102013)
BALWANT KUMAR YADAV (180102012)
ABHINAV GUPTA (180102005)
SIDHARTH SHUKLA (180102025)

Under the Supervision of

Dr. RAJIV GANGULY

Associate Professor



Department of Civil Engineering
HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

Kanpur-208002

July, 2022

This is to certify that Divyansh Yadav (180102013), Balwant Kumar Yadav (180102012), Abhinav Gupta (180102005) and Sidharth Shukla (180102025) have carried out research work presented in this report entitled "ANALYSING THE EFFECTS OF PARTICULATE MATTER IN KANPUR CITY" for the award of Bachelor of Technology from Harcourt Butler Technical University, Kanpur under my supervision. The report embodies results of original work and studies carried out by the student herself/himself and the contents of this report do not form the basis for the award of any other degree to the candidate or to anybody else from this or any other University/Institution.

Date: 13.07.2022

Rojh Ganguly)

(Dr. Rajiv Ganguly)

Associate Professor

Civil Engineering Department

H.B.T.U. Kanpur

## **ACKNOWLEDGEMENTS**

First and foremost, we would like to express our deep sense of gratitude to our project guide **Dr. Rajiv Ganguly**, Associate Professor, Department of Civil Engineering, H.B.T.U. Kanpur for his valuable guidance, comments, teachings and overall support in which he had contributed for the successful completion of this Project report. Without his guidance and persistent help this project would not have been possible.

We are also extremely thankful to our Head of Department **Dr. Dipteck Parmar** and other faculty members of the departments for their guidance and constructive suggestions during various project progress presentation held during academic sessions.

We would also like to thank our parents who have patiently helped us as we went through our work and would also like to thank our friends who have helped us in making our work more organised and well- stacked till the end. Last but clearly not the least, we would thank the almighty forgiving us strength to complete my report on time.

Date: 13.07.2022

Place: Kanpur

(Divyansh Yadav)

Roll No.180102013

(Salwant

(Balwant Kumar Yadav)

Roll No. 180102012

(Abhinav Gupta)

Roll No. 180102005

(Sidharth Shukla)

Roll No. 180102025

# EFFICACY OF SUSTAINABLE CONCRETE MADE OF BAGASSE ASH

by

ABHISHEK KUMAR CHAUDHARY (180102007)
SACHIN KUMAR RISHI (180102022)
AKANKSHA VERMA (180102031)
MOHD. ASIF (170102018)



Department of Civil Engineering

HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

KANPUR - 208002

July, 2022

# EFFICACY OF SUSTAINABLE CONCRETE MADE OF BAGASSE ASH

Submitted in Partial fulfilment of the requirements of the Degree of

Bachelor of Technology in Civil Engineering

by

ABHISHEK KUMAR CHAUDHARY (180102007)
SACHIN KUMAR RISHI (180102022)
AKANKSHA VERMA (180102031)
MOHD. ASIF (170102018)

Under the Supervision of

Dr. KAVITA TANDON

**Assistant Professor** 



Department of Civil Engineering

HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

KANPUR - 208002

July, 2022

This is to certify that Abhishek Kumar Chaudhary (180102007), Sachin Kumar Rishi (180102022), Akanksha Verma (180102031), and Mohd. Asif (170102018) has carried out the research work presented in this report entitled- "EFFICACY OF SUSTAINABLE CONCRETE MADE OF BAGASSE ASH" for the award of Bachelor of Technology from Harcourt Butler Technical University under my supervision. The report embodies the results of original work, and studies are carried out by the student himself/herself. The contents of the report do not form the basis for the award of any other degree to the candidate or anybody else from this or any other University/Institution.

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Date- 13-07-2022

(Dr. Kavita Tandon)

Assistant Professor

Dept. of Civil Engineering

HBTU, Kanpur

#### ACKNOWLEDGEMENTS

Our heart quivers with the thrill of offering gratitude to those individuals who helped us in the completion of the project. The most idyllic point of presenting a project is the opportunity to thank those who have contributed to it.

Unfortunately, the list of acknowledgments no matter how extensive is always incomplete and inadequate. Indeed this page of mention shall never be able to touch the horizon of generousness of those who tendered their help to us. First of all, we would like to express our gratitude and obligation to Dr. Kavita Tandon for her kindness in allowing us to introduce the present topic for her inspiring direction, constructive feedback and valuable propositions throughout this project work.

We feel privileged in conveying our thanks to all the faculty and staff members of our department for their encouragement and moral support. A combination of this nature could never have been attempted without reference to and inspiration from the works of others whose details have been mentioned in the reference section. We acknowledge our indebtedness to all of them.

(Abhishek Kumar Chaudhary)

(180102007)

(Sachin Kumar Rishi)

(180102022)

(Akanksha Verma)

(180102031)

Mohd. Asif)

(170102018)

# SOIL STABILIZATION USING COIR FIBRE

by
UJJWAL SINGH (180102028)
SUBHASH KUMAR RANA (180102027)
AASTHA OMAR (180102003)
APOORV SINGH (180102008)



Department of Civil Engineering

HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

KANPUR - 208002

July, 2022

## SOIL STABILIZATION USING COIR FIBRE

Submitted in Partial fulfilment for the requirements of the Degree of

Bachelor of Technology in Civil Engineering

by

UJJWAL SINGH (180102028)
SUBHASH KUMAR RANA (180102027)
AASTHA OMAR (180102003)
APOORV SINGH (180102008)

Under the Supervision of

Mr. MANISH KUMAR

**Assistant Professor** 



Department of Civil Engineering

HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

KANPUR - 208002

July, 2022

This is to certify that Ujjwal Singh (180102028), Subhash Kumar Rana (180102027) Aastha Omar (180102003), Apoorv Singh (180102008) students of Final B.Tech Civil Engineering, Harcourt Butler Technical University, Kanpur have successfully completed their B.Tech. Project titled "Soil Stabilization using coir fibre" under my supervision and guidance. The project report embodies the study and work carried out by students themselves and the content of the report do not form the basis for the award of any other degree to the candidates.

Date: 13/07/2022

(Manish Kumar)
Assistant Professor
Civil Engineering Department
HBTU, Kanpur

## ACKNOWLEDGEMENTS

It is our honour and duty to acknowledge the knowledge and assistance that we obtained from many sources throughout the compilation of this project report. Without their invaluable assistance, cooperation, and direction, it would not have been feasible to compile this report in the manner that it was. We would first want to express our gratitude to the Civil Engineering Department of HBTU Kanpur, which enabled us to prepare this report. We want to express our sincere gratitude to Mr. Manish Kumar Sir, the Assistant professor under whose direction this project was created. Second, we want to express our gratitude to HOD Prof. Dipteek Parmar Sir for his invaluable advice and support during the project. Our deepest appreciation to Mr. Manish Kumar, our project mentor.

Date: 13/07/2022

(180102028)

Julahaal (Subhash Kumar Rana)

(180102027)

(Aastha Omar)

(180102003)

(Apoorv Singh)

(180102008)

## TRAFFIC SIGNAL DESIGN USING GREEN FLOW ALGORITHMS

In Partial fulfilment for the award of the degree of
BACHELOR OF TECHNOLOGY
Civil Engineering

by

ASHISH TRIVEDI(180102010)
PANKAJ KUMAR(180102018)
SOURABH YADAV(180102026)
YUVRAJ PAL(180102030)
Final B. Tech. Civil Engineering

Under the Guidance of:

Dr. PRADEEP KUMAR

Professor



Department of Civil Engineering

HARCOURT BUTLER TECHNICAL UNIVERSITY

KANPUR – 208002

JULY 2022

This is to certify that the Project Work, entitled "TRAFFIC SIGNAL DESIGN USING GREEN FLOW ALGORITHMS" is a bonafide work of M/s Ashish Trivedi (180102010), Pankaj Kumar (180102018), Sourabh Yadav (180102026) and Yuvraj Pal (180102030) who carried out the research under my supervision. To the best of my knowledge, the work reported herein does not form part of any other thesis or desertion on the basis of which a degree or reward was conferred on an earlier occasion on this or other candidate.

Signature:

Dr. PRADEEP KUMAR

**PROFESSOR** 

Civil Engineering Department

Date:19 July,2022

## ACKNOWLEDGEMENTS

I would like to express my special thanks to our Professor of Department Dr. Pradeep Kumar, CIVIL ENGINEERING, HBTU, Kanpur who gave us the opportunity and fruitful guidance to this project report on the topic of 'TRAFFIC SIGNAL DESIGN USING GREEN FLOW ALGORITHMS'.

After completion of this project report, we got many information which will surely help in our future.

I am extremely grateful to my parents and friends who gave me valuable suggestions and guidance for completion of my project report. The co-operation and healthy criticism came handy and useful with them.

Date: 9 July,2022

Sourabh Yadav (180102026)

Ashish Trivedi (180102010)

Pankaj Kumar (180102018)

Yu (180102030)

3

## DESIGN OF R.C.C. CIRCULAR OVERHEAD TANK

A Project Report Submitted

In partial fulfillment of the requirements

for the Degree of

**Bachelor of Technology** 

In Civil Engineering

Ву

ASHTABHUJA YADAV (180102011)

RAHUL VERMA (180102020)

PRANAV RAI (180102019)

ABHISHEK CHOUDHARY(180102006)

Under the Supervision of

Dr. SUNIL KUMAR

Professor

Department of Civil Engineering



Department of Civil Engineering

**JULY 2022** 

CEKITTICAL

This is to certify that Ashtabhuja Yadav(180102011), Rahul Verma (180102020), Pranav Rai (180102019) and Abhishek Choudhary (180102006) has carried out the research work presented in this report entitled- "DESIGN OF R.C.C CIRCULAR OVERHEAD TANK" for the award of Bachelor of Technology from Harcourt Butler Technical University, under my supervision. The report embodies results of original work, and studies are carried out by the student himself and the contents of the report do not form the basis for the award of any other degree to the candidate or anybody else from this or any other University/Institution.

This is to certify that the above statement is made by the candidates is correct to the best of my knowledge.

Dr. Suril Kumar

(Project Guide)

Professor

Dept. of Civil Engineering

## **ACKNOWLEDGEMENTS**

Our heart quivers with the thrill of offering gratitude to those individuals who helped us in the completion of the project. The most idyllic point of presenting a project is the opportunity to thank those who have contributed to it.

Unfortunately, the list of acknowledgments no matter how extensive is always incomplete and inadequate. Indeed this page of mention shall never be able to touch the horizon of generousness of those who tendered their help to us. First of all, we would like to express our gratitude and obligation to Dr. Sunil Kumar for his kindness in allowing us to introduce the present topic for her inspiring direction, constructive feedback and valuable propositions throughout this project work.

We feel privileged in conveying our thanks to all the faculty and staff members of our department for their encouragement and moral support. A combination of this nature could never have been attempted without reference to and inspiration from the works of others whose details have been mentioned in the reference section. We acknowledge our indebtedness to all of them.

Ashtabhuja Yadav (180102011)

Rahul Verma (180102020)

Pranav Rai (180102019)

Abhishek Choudhary (180102006)

# "STATISTICAL ANALYSIS AND DETERMINATION OF WATER QUALITY INDEX"

By

SALONI MISHRA (180102023)

JIGYASA SHARMA (180102017)

RHYTHM DUBEY (180102021)

HARSH VERMA (180102014)



Department of Civil Engineering

HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

July 2022

# "STATISTICAL ANALYSIS AND DETERMINATION OF WATER QUALITY INDEX"

A project report submitted

In partial fulfilment of the requirements

For the Degree of

BACHELOR OF TECHNOLOGY

In

CIVIL ENGINEERING DEPARTMENT

By

SALONI MISHRA (180102023)

JIGYASA SHARMA (180102017)

RHYTHM DUBEY (180102021)

HARSH VERMA (180102014)

Under the guidance of

Dr. DEEPESH SINGH

(ASSOCIATE PROFESSOR)



Department of civil engineering

HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

(U.P), INDIA

**July 2022** 

Certified that SALONI MISHRA (180102023), JIGYASA SHARMA (180102017), RHYTHM DUBEY(180102021), HARSH VERMA(180102014) have carried out the project work presented in this report entitled "STATISTICAL ANALYSIS AND DETERMINATION OF WATER QUALITY INDEX" for the award of Bachelor of Technology in Civil Engineering from Harcourt Butler Technical University ,Kanpur (UP) under my supervision and guidance. The report embodies result of original work and studies carried out by students themselves and the contents of the report do not form the basis for the award of any other degree to the candidate or to anybody.

1

(Dr. Deepesh Singh)

(Associate Professor)

Civil Engineering Department

HBTU, Kanpur

## A STUDY OF TECHNICAL AND ENVIRONMENTAL FEASIBILITY OF FLY ASH BRICKS

A Project Report

Submitted

In partial fulfillment of the requirements

for the Degree of

**Bachelor of Technology** 

In

**Civil Engineering** 

By

VIKRANT SRIVASTAVA (180102029)

SANDEEP KESHARI (180102024)

ARYAMAN SINGH (180102009)

PRASHANT TIWARI (170102022)

HIMANSHU SINGH (180102015)

Under the Supervision of

Mr. Prithvi Pati

Associate Professor

Department of Civil Engineering



Department of Civil Engineering

HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

July 2022

This is to certify that Vikrant Srivastava (180102029), Sandeep keshari (180102024),
Aryaman Singh (180102009), Prashant Tiwari (170102022), Himanshu Singh (180102015)
has carried out the research work presented in this report entitled-"A Study of Technical and
Environmental feasibility of fly ash bricks" for the award of Bachelor of Technology from
Harcourt Butler Technical University, under my supervision. The report embodies results of
original work, and studies are carried out by the student himself, and the contents of the report do
not form the basis for the award of any other degree to the candidate or anybody else from this or
any other University/Institution.

Mr. Prithvi Pati
Associate Professor
Department of Civil Engineering
HBTU, Kanpur

Date: 15 July,2022

#### ACKNOWLEDGEMENT

Our heart quivers with the thrill of offering gratitude to those individuals who helped us in the completion of the project. The most idyllic point of presenting a project is the opportunity to thank those who have contributed to it.

Unfortunately, the list of acknowledgments no matter how extensive is always incomplete and inadequate. Indeed this page of mention shall never be able to touch the horizon of generousness of those who tendered their help to us. First of all, we would like to express our gratitude and obligation to Mr. Prithvi Pati for his kindness in allowing us to introduce the present topic for her inspiring direction, constructive feedback and valuable propositions throughout this project work.

We are extremely thankful to our Head of Department **Dr. Dipteck Parmar** and other faculty and staff members of our department for their encouragement and moral support. A combination of this nature could never have been attempted without reference to and inspiration from the works of others whose details have been mentioned in the reference section. We acknowledge our indebtedness to all of them.

(Vikrant Srivastava ) Roll No. 180102029

(Sandeep keshari) Roll No. 180102024

(Aryaman Singh) Roll No. 180102009

(Prashant Tiwari) Roll No. 170102022

(Himanshu Singh) Roll No. 180102015

### **Harcourt Butler Technical University Computer Science & Engineering Department**

B.Tech CSE (2021-22)- Final Year Project						
Sr. No.	Roll No.	Name of Student	Topic of Project	Project guide		
1	180104008	Aditya kumar	Real time Human activity recogniton using deep learning	Dr. Prabhat Verma		
2	180104009	Ajaj Ahamed	Real Time Human activity recogniton using deep learning	Dr. Prabhat Verma		
3	180104017	Arvind Kumar	Real Time Human activity recogniton using deep learning	Dr. Prabhat Verma		
4	180104040	Ram Bharosh Kumar	Real Time Human activity recogniton using deep learning	Dr. Prabhat Verma		
5	180104034	Krishnam Dhawan	Tree Born: "HEAR THE ECO", Air quality monitoring	Dr. Anita Yadav		
6	180104051	Shivam Nehra	Tree Born: "HEAR THE ECO", Air quality monitoring	Dr. Anita ⁄adav		
7	180104037	Prateek Goel	Tree Born: "HEAR THE ECO", Air quality monitoring	Dr. Anita Yadav		
8	180104062	Aman Singh	Tree Born: "HEAR THE ECO", Air quality monitoring	Dr. Anita Yadav		
9	180104057	Utkarsh Tiwari	Automated driving aid using computer vision	Dr. Raghuraj Singh		
10	180104041	Rishpreet Singh	Automated driving aid using computer vision	Dr. Raghuraj Singh Dr. Raghuraj		
11	180104015	Ansh Shankar	Automated driving aid using computer vision	Singh  Dr. Raghuraj		
12	180104016	Arpit Malik	Automated driving aid using computer vision	Singh  Dr. Vandana		
13	180104032	Kamal kant Singh	Heart Disease using ML	Dixit  Dr. Vandana		
14	180104011	Akshay rathi	Heart Disease using ML	Dixit  Dr. Vandana		
15	180104029	Honey singh	Heart Disease using ML	Dixit Dr. Vandana		
16	180104047	Shashank gautam	Heart Disease using ML  Automatic license number plate recognition	Dixit Dr. Prabaht		
17	180104001	Aakriti Kaithwas	ystem Automatic license number plate recognition	Verma Dr. Prabaht		
18	180104003	Abhay	system  Automatic license number plate recognition	Verma Dr. Prabaht		
19	180104005	Abhishek Kamal	system  Automatic license number plate recognition	Verma Dr. Prabaht		
20	170104063	Vishal Singh	system	Verma Dr. Anita		
21	180104059	Vivek verma	Image caption generator	/adav Dr. Anita		
22	1801004060	Yaman Varshney	Image caption generator	<b>/adav</b>		

				Dr. Anita
23	180104030	Ishank Katiyar	Image caption generator	<b>r</b> adav
			l	Dr. Anita
24	180104044	Sameer garg	Image caption generator	/adav
25	100101050	CI: : D I	<b>.</b>	Dr. Raghuraj
25	180104052	Shivangi Dubey	Driver drowsiness detection system	Singh
26	400404064	NA -L -L-1 - IZ - L	Bit and a situate data the control	Dr. Raghuraj
26	180104064	Mokshin Koul	Driver drowsiness detection system	Singh
27	190104024	Carima Singh	Driver dreweiness detection system	Dr. Raghuraj
21	180104024	Garima Singh	Driver drowsiness detection system	Singh
28	180104058	Vishal Anand	Driver drowsiness detection system	Dr. Raghuraj
20	160104036	VISIIdi Alidilu	Driver drowsiness detection system	ingh Dr. Vandana
20	100104013	Alankrit Varma	Algorithimis trading bot	
29	180104012	Alankrit Verma	Algorithimic trading bot	Dixit
20	100104030	Llovobito Avus	Algorithism is two diagraps	Dr. Vandana
30	180104028	Harshita Arun	Algorithimic trading bot	Dr. Vandana
24	100104036	Harch Crivactoria	Algorithimic trading bot	Dr. Vandana
31	180104026	Harsh Srivastava	Algorithimic trading bot	Dixit
32	180104039	Rajneesh Dubey	Algorithimic trading bot	Dr. Vandana Dixit
32	180104039	Rajneesh Dubey		
			Home loan approval prediction using big data	Dr. Vandana
33	180104020	Deeksha Lala	and ML	Dixit
			Home loan approval prediction using big data	Dr. Vandana
34	180104038	Priyanshi Agarwal	and ML	Dixit
			Home loan approval prediction using big data	Dr. Vandana
35	180104043	Sakshi Agarwal	and ML	Dixit
			Home loan approval prediction using big data	Dr. Vandana
36	180104054	Stuti Saini		Dixit
				-
			Sign language recognition system for deaf and	Dr. Narandra
37	180104046	Camuank crivactava	dumb using a symbol chart(using ML, Computer vision, DIP)	Dr. Narendra
37	180104040	Samyank srivastava	•	Kohli
			Sign language recognition system for deaf and	
			dumb using a symbol chart(using ML, Computer	Dr. Narendra
38	180104004	Abhinav mehrotra	vision, DIP)	Kohli
			Sign language recognition system for deaf and	
			dumb using a symbol chart(using ML, Computer	Dr. Narendra
39	180104002	aakriti Sehrawat	vision, DIP)	Kohli
			Sign language recognition system for deaf and	
			dumb using a symbol chart(using ML, Computer	Dr. Narendra
40	180110013	Amit Singh	vision, DIP)	Kohli
			· ·	Dr. Vandana
41	180110028	Doonika iunoia	Music recommendation system based on facial	Dixit
41	100110070	Deepika juneja	<u> </u>	
	40040404	Charle !	Music recommendation system based on facial	Dr. Vandana
42	180104048	Shashwat agarwal	emotion recognition	Dixit
			Music recommendation system based on facial	Dr. Vandana
43	180105018	Pradyuman Maurya	emotion recognition	Dixit

			Music recommendation system based on facial	Dr. Vandana
44	180104022	Deepak Pratap Seth	emotion recognition	Dixit
		·		Dr. Narendra
45	180104018	Ashutosh trivedi	User chat analysis for multiple cases	Kohli
				Dr. Narendra
46	180104010	Akshat Sachan	User chat analysis for multiple cases	Kohli
				Dr. Narendra
47	180104061	Ajit jain	User chat analysis for multiple cases	Kohli
				Dr. Narendra
48	180104027	Harshit Jain	User chat analysis for multiple cases	Kohli
				Dr. Narendra
49	180104050	Shivam kumar	crime rate prediction using k -means	Kohli
		Suryansh		Dr. Narendra
50	180104055	raghuvanshi	crime rate prediction using k -means	Kohli
				Dr. Narendra
51	180104036	Manish kumar	crime rate prediction using k -means	Kohli
				Dr. Narendra
52	180104025	harsh rathaur	crime rate prediction using k -means	Kohli
				Dr. Raghuraj
53	180104021	Deepak kumar	finding missing person using AI	Singh
				Dr. Raghuraj
54	180104042	Rohit pratap singh	finding missing person using AI	Singh
	100101010		6. 1	Dr. Raghuraj
55	180104019	Chandrakant singh	finding missing person using AI	Singh
5.0	400403006	Alaberta de la la contra de la contra dela contra de la contra del contra de la contra del contra de la contra del contra de la contra de la contra de la contra de la contra del contra de la contra del contra de la contra de la contra de la contra de l	Gulling advisors and Al	Dr. Raghuraj
56	180103006	Abhishek chaudhary	finding missing person using AI	Singh
	100104000	A la la i a la a la a la a la	Ovelity shoulding value income are consider	Dr. Prabhat
57	180104006	Abhishek singh	Quality checking using image processing	Verma
58	100104007	aditua divit	Quality shocking using image processing	Dr. Prabhat
36	180104007	aditya dixit	Quality checking using image processing	Verma Dr. Prabhat
59	180104045	Samir yadav	Quality checking using image processing	
39	160104043	Deepanshu	Quality checking using image processing	Verma Dr. Prabhat
60	180104023	chaudhary	Quality checking using image processing	Verma
00	100104023	onadanary	County encoking using intuge processing	Dr. Anita
61	180104063	Rohit pratap singh	Cartoonify image with ML	Yadav
01	100104003	Home pracap singil	Controlling mage with ML	Dr. Anita
62	180104014	Ankit singh	Cartoonify image with ML	/adav
"				Dr. Anita
63	180104013	Aman verma	Cartoonify image with ML	/adav
		-	, 0	Dr. Anita
64	180104049	shiv kumar	Cartoonify image with ML	<b>r</b> adav

### **Harcourt Butler Technical University**

## Computer Science & Engineering Department

### B.Tech Information Technology (2021-22)- Final Year Project

SI.	Roll No.	Name	Project Name	Supervisor	
1	180108020	Pragya Katiyar			
2	180108032	Rajat Aggarwal	Automated Rating of	Dr. Vandana Dixit Kaushik	
3	180108029	Vaibhav Tripathi	Online Review	Dr. Valldalla Dixit Kausliik	
4	180108017	KAPIL KUMAR DWIVEDI			
5	180108026	Saumya Rastogi			
6	180108018	Milind Kaushal	Cattle Care Application	Dr. Anita Yadav	
7	180108015	Divyansh Tripathi			
8	180108007	Ankesh ojha			
9	180108008	Ashutosh Bhalothia	Web-Scraper	Prof. Raghuraj Singh	
10	180108005	Amrendra singh	web-scraper	FIOI. Ragilulaj Siligil	
11	180108024	Sachin Kumar			
12	180108002	Alankrita Mishra	Function Bearing and		
13	180108030	Yukti Gangwar	Emotion Recognition and Depression Detection	Dr. Prabhat Verma	
14	180108027	Shipra Roy	Depression Detection		
15	180108006	Ankesh Kumar			
16	180108004	Amit kumar patel	Stock Market Prediction	Dr. Prabhat Verma	
17	180108003	Alok Dwivedi	Stock Market Frediction	Di. Flabilat Velilla	
18	180108028	Taquiuddin			
19	180108013	Balram Verma			
20	180108001	Akshit Singh	Indian sign language  Detection using Machine	Prof. Narendra Kohli	
21	180108031	Priyakant Panwar	Learning	FIOI. Nateriala Romi	
22	170108002	ABHAY PATEL	2001111118		
23	180108023	Ritik kumar Nayak	Analysis of Coronary Artery		
24	180108022	Rishabh R Chaudhary	Disease Using Various	Prof. Raghuraj Singh	
25	180108019	Mohak Nigam	Machine Learning	Fior. Nagnuraj Singh	
26	180108021	Rajwardhan Singh	Techniques		
27	180108014	Divya Kumar Jaiswal			
28	180108016	Hemant Kumar Patel	Critique	Prof. Narendra Kohli	
29	180108009	Atul Bharti	Cittique	i ioi. Naiciiuia Noiiii	
30	180108025	Sanskrati Gupta			
31	180108012	AYUSHI JAISWAL	Proceeding Production		
32	180108010	Avantika Singh Parihar	Personality Prediction System Using CV Analysis	Dr. Vandana Dixit Kaushik	
33	180108011	Avinash Dixit	System osing ev /marysis		

## **Harcourt Butler Technical University**

### **Computer Science & Engineering Department**

## MCA (2021-22 ) (Three Year Programme)- Final Year Industrial Project

SR.NO	ROLL NO	STUDENT NAME	<b>Project Title</b>	Company Name	From	То
1	190231001	ABHAY PRATAP SINGH	Internship Task	Cognizant	22/4/2022	22/10/202
2	190231002	ABHISHEK SINGH	Front End Development	Smart Programming Pvt Ltd.	15/2/2022	14/7/2022
3	190231003	ABHISHEK FRIPATHI	Buzzz A Social Media Web Application	To The New	02-08-2022	08-08- 2022
4	190231004	AKASH AGARWAL	BooKz Kart	Smart Programming Pvt Ltd.	15/2/2022	14/7/2022
5	190231005	AKASH KESHARI	Job Portal	Smart Programming Pvt Ltd.	14/2/2022	14/6/2022
6	190231006	AKASH KUMAR	Online Code Editior	Smart Programming	02-05-2022	15/7/2022
7	190231007	AKASH TYAGI	Internship Task	MediaTek India Fechnology Pvt. Ltd.Noida	12-05-2021	31/05/202
8	190231008	AKSHAT JAIN	IAM+(Middle East Bahrain)	Unthinkable Solutions LLP	10-04-2021	06-03- 2022
9	190231009	AMISHA KUMARI	Hospital Management System	SkyBase Technolgy	02-01-2022	05-10- 2022
10	190231010	ANKITA PANDEY	Buzzz A Social Media Web Application	To The New	02-08-2022	08-08- 2022
11	190231012	ANSHIKA GOVIL	Internship Task	Samsung SDS	02-01-2022	30/6/2022
12	190231013	ARPIT AMRESH RAGHUBANSI	SAP-ABAP Development	IBM	01-12-2022	06-10- 2022
13	190231014	ARPITA VERMA	Shoping Cart	Samsung SDS	02-01-2022	30/6/2022
14	190231015	ASHUTOSH SINGH	Internship Task	Samsung SDS	02-01-2022	30/6/2022
15	190231016	ASHUTOSH FRIPATHI	Municipal Coroporation	Webhub Fechnology	02-01-2022	30/6/2022

			Complained Handling Process			
16	190231017	ASHVANI PANDEY	Job Portal	Smart Programming Pvt Ltd.	14//2/2022	14/7/2022
17	190231018	ASHVANI SINGH	PB Direct ( Profession Beauty Direct)	MobCoder	02-01-2022	31/7/2022
18	190231019	AYUSH AGRAWAL	Internship Task	Samsung SDS	02-01-2022	30/6/2022
19	190231020	AYUSH GAUTAM	Online Chating Application	WUD Theory Pvt Ltd	20/1/2022	25/4/2022
20	190231021	AYUSH PANDEY	Social Media Web Application	Tanzanite InfoTech	02-05-2022	20/6/2022
21	190231022	AYUSHI SINGH	Online Examination Systsem	Samsung SDS	02-01-2022	30/6/2022
22	190231023	BHUPENDRA UMRAO	Online Chating System	Cosmo Info Solutions	02-01-2022	15/5/2022
23	190231024	DEEPAK MISHRA	Internship Task	HP Intership India	02-05-2022	07-05- 2022
24	190231025	DEVANSHA	Self Driving Car	E-Gains	02-05-2022	31/5/2022
25	190231026	DIVYAPRAKASH YADAV	Internship Task	Samsung SDS	02-01-2022	30/6/2022
26	190231027	GITANJALI SAINI	Health Cloud CRM	Unthinkable Solutions LLP	10-04-2021	06-04- 2022
27	190231028	HARSHIT OMER	Pick Food	Sky Base Institute	02-01-2022	05-10- 2022
28	190231029	HIMANSHU AWASTHI	Social Media Application	To The NEW	02-01-2022	30/6/2022
29	190231030	ISHITA KUMARI	Twitter Sentiment Analysis	Cognizant	22/1/2022	31/5/2022
30	190231031	KAJAL VISHWAKARMA	Online Shoping	Samsung SDS	02-01-2022	30/6/2022
31	190231032	KAJUL SHARMA	Smart Planning and Execution FPP	Yamaha Motors Solution Ltd India	27/1/2022	27/5/2022
32	190231033	KIRTI SINGH	Disease Predictor Using ML	SkyBase Technolgy	02-01-2022	05-10- 2022
33	190231034	KM AARZOO RATHI	E-Commerce App (E-Search)	Tycho Fechnologies Pvt Ltd.	1/2/20222	30/4/2022

34	190231035 KM SMRITI GUPTA		Scrum Master	Nagarro	03-09-2022	30/8/2022	
35	190231036	KRISHNANAND SINGH	Internship Task	Samsung SDS	02-01-2022	30/6/2022	
36	190231037 KUNVAR ABHISHEK SINGH		Greenglobe Natural Foods Customer Relationship Management	Webhub Fechnology	02-01-2022	30/6/2022	
37	190231038	MANDAKINI SINGH	To 24/7 Shoping Online Shoping)	Sky Base Computer Institute	02-01-2022	05-10- 2022	
38	190231039 MANJARY GUPTA		Food Ordering System Using PHP	Tikona Infinet Pvt Ltd.	02-01-2022	05-01- 2022	
39	190231040	MANJEET SINGH	Titanic3	Cognizant	18/5/2022	17/7/2022	
40	190231041 MARISHA AGNIHOTRI		E-Commerce Website	Cognizant Fechnology Solution	18/1/2022	16/6/2022	
41	190231043	MOHD UVAID	Apna Store	Webhub Fechnology	02-01-2022	30/6/2022	
42	190231044	MOHIT YADAV	Kismat Collection A Spin Wheel)	Dark Beans Software Pvt Ltd.	31/3/2022	30/6/2022	
43	190231045	NAMAN ARORA	Internship Task	Sapphire Application Integrators Pvt. Ltd.	01-01-2022	31/5/2022	
44	190231046 NANDITA SAXENA		Stanza Living	Daffodil Software Unthinkable Solutions LLP	10-04-2021	06-04- 2022	
45	190231047	NIKITA UPADHYAY	Home Loan	Samsung SDS	02-01-2022	30/6/2022	
46	190231048	NIRAJ SINGH	Internship Task	Samsung SDS	02-01-2022	30/6/2022	
47	190231049	PRAMOD KUMAR CHAUHAN	Online Parking System	Midbrains Fechnology Pvt. Ltd	01-03-2022	07-04- 2022	
48	190231050	PRINCEE GUPTA	E-Commerce Website	Webhub Fechnology	02-01-2022	30/6/2022	
49	190231051	190231051 RAJAT DIXIT		Sky Base Computer Institute	02-01-2022	05-10- 2022	
50	190231052	RAJAT PAL	age Zone ETL Developer	CELEBAL Fechnologies	01-01-2022	30/6/2022	
51	190231053	RISHABH KUMAR MAURYA	Car Rental	Cosmo Info Solutions	02-05-2022	06-05- 2022	

52	190231054	RITESH VERMA	Online Shoping	Samsung SDS	02-01-2022	30/6/2022	
53	190231056	ROHIT SHARMA	Hexaview Korporate (OMS)	Hexaview Fechnologies	01-05-2022	07-04- 2022	
54	190231057	SADAKAT ALI	Internship Task	Brabura Solutions Pvt. Ltd.	14/2/2022	07-03- 2022	
55	190231058	SAGARIKA IAISWAL	Sign Language to Fext Conversion for Deaf and Dumb	SkyBase Technolgy	02-01-2022	05-10- 2022	
56	190231061	SAUMITRA BAJPAI	Market on Wheels	Cognizant	02-12-2022	08-08- 2022	
57	190231062 SAURABH KUMAR TRIPATHI		Internship Task	Samsung SDS	02-01-2022	30/6/2022	
58	190231063	SHALINI VERMA	Online Shoping	Samsung SDS	02-01-2022	30/6/2022	
59	190231064 SHAMALI GUPTA		Futuristic Fechnology	STUCRA Pvt Ltd.	01-01-2022	30/05/202	
60	190231065	SHIPRA	CCTV Viewer App	MobCoder	03-10-2022	06-10- 2022	
61	190231066 SHIVAM BANSAL		Internship Task	Samsung SDS	02-01-2022	30/6/2022	
62	190231067 SHRUTI AGARWAL		Congnizant Covid Portal	Cognizant Fechnology Solution	22/1/2022	16/6/2022	
63	190231068	SMRITI MISHRA	Internship Task	Samsung SDS	02-01-2022	30/6/2022	
64	190231069 STUTI SHUKLA		Internship Task	Samsung SDS	02-01-2022	30/6/2022	
65	190231070	SWAPNIL YADAV	Hand Gesture Volume Controller	SkyBase Technolgy	02-01-2022	05-10- 2022	
66	190231071	SYED AHMAD AZIZ	Website Design & Development	ATOS Syntel Pvt Ltd.	01-01-2022	05-03- 2022	
67	190231072	TUSHAR AGARWAL	Samsung SDS Chat Application	Samsung SDS	02-01-2022	30/6/2022	
68	190231073	TUSHAR GUPTA	Internship Task	Samsung SDS	02-01-2022	30/6/2022	
69	190231074	VEDIKA TIWARI	O-Zon ( Orphanage and Old age Zone	Sky Base Computer Institute	02-01-2022	05-10- 2022	
70	190231076	VIRAT UPADHYAY	Invoice Management	RA Institute	15/2/2022	15/5/2022	

71	190231077	VIVEK SHARMA	Internship Task	Hexaview	02-01-2022	31/7/2022	1
			_	Technologies			ı

#### **Harcourt Butler Technical University Computer Science & Engineering Department** MCA (2021-22) (Two Year Programme)-Final Year Project Sr. No. Roll NO. **Group Member's Name Project Topic Project Supervisior** 200231001 Aakash Gaur Sentiment 2 200231007 Ajay Kumar Verma Analysis of Prof. Narendra Kohli Product based 3 200231016 **Anurag Singh** Reviews 4 200231021 Ayushi Verma Comparative 5 200231011 Akshika Mittal Study Amazon 6 200231035 Mohd Shadab **Apparel** Prof. Raghuraj Singh 7 200231064 Shivangi Recommendation 8 200231075 Tuba Khan System 9 200231045 Pragati Tiwari KARKINOS 10 200231006 Aditya Soni Restaurants Dr. Prabhat Verma Management 200231003 Abhishek Dwivedi 11 System Using ML 12 200231078 Vartika Jaiswal **Brain Tumor** 13 200231074 Sushant Baghel **Detection Using** Dr. V.D. Kaushik 14 Deep Learning 200231037 Navjyot Kumar Models 15 200231073 Suryansh Singh 16 200231032 Kushagra Verma **Emojifier Using** 17 200231044 Prachi Gupta Dr. V.D. Kaushik CNN 18 200231066 Shubham Logani 19 200231019 Avani Singh 20 200231024 Dheeraj Tiwari **Predicting Sales** Dr. Prabhat Verma for Supermarkets 21 200231039 Nivedita Jain 22 200231047 Pratibha Vishwakarma 23 200231025 **Gaurav Singh** Raj Kumar 24 200231052 **Digital Learning** Dr. Prabhat Verma Via Gamification 25 200231054 Riturendra 26 200231059 Saumya Sachan

27	200231013	Ankit Yadav			
28	200231028	Himanshu Kumar Jaiswal	Sensor Data	D A '' V I	
29	200231041	Pawan Kumar Verma	Fusion	Dr. Anita Yadav	
30	200231061	Shikhar Kumar			
31	200231031	Kamal Nayan Rai			
32	200231033	Lokesh Katiyar	Malicious Node Detection in	Dr. Anita Yadav	
33	200231046	Pranshu Katiyar	— Wireless Network	DI. Allita Tauav	
34	200231053	Rishabh Verma	TTII CICSS TTCCTTOTIC		
35	200231067	Shubhanshu Maurya	Decentralized		
36	200231071	Sumit Gangwar	Cloud Storage	Dr. Anita Yadav	
37	200231057	Sanjay Chaudhary	with BlockChain	Dr. Amta radav	
38	200231050	Rahul kumar Gupta			
39	200231017	Arpit chaturvedi	Customer		
40	200231018	Arpita Kashyap	Partnership Portal	Prof. Narendra Kohli	
41	200231030	Kajal Kumari	Using Cloud	Tron. Narchara Norm	
42	200231056	Sagar Gupta	Technology		
43	200231014	Anshika Pandey	Personalized Film		
44	200231068	Sidra Zaidi	and Television	Prof. Narendra Kohli	
45	200231072	Supriya Shahi	Recommendation	Tron Naterial a Romi	
46	200231076	Utkarsh Chaudhary	System		
47	200231023	Chirag Papneja			
48	200231042	Prabhat Kumar Kohliyan	Stock Market	Dr. Prabhat Verma	
49	200231012	Aman Kant Savita	Prediction System		
50	200231051	Rahul Mohan			
51	200231002	Abhishek Dubey			
52	200231004	Adarsh Gupta	Transcatify - An E-	Prof. Raghuraj Singh	
53	200231005	Adit Agarwal	wallet web app		
54	200231009	Akash Arun Gupta			
55	200231049	Rahul Gupta			
55 56	200231049	Satyam Jaiswal	Face Mask		
57	200231038	Paras Gupta	Detection &	Dr. Anita Yadav	
58	200231040	<u> </u>	Recognition		
20	200231009	Smriti Tripathi			
59	200231027	Harshit Shukla			
60	200231027	Neha Singh	Emotion Detection	Prof. Raghuraj Singh	
61	200231038	Prabhat Kumar tiwari	Through Speech	i ioi. Nagiiaiaj Jiligil	
01	200231043	i iasmat Numai tiwan			
			Study the impact	Dr. V.D. Kaushik	

63	200231062	Shivam Singh	of EVs on Indian	
64	200231063	Shivam Tiwari	Economy	
65	200231034	Manali Sharma		
66	200231048	Priya Katiyar	Distance	Dr. Anita Yadav
67	200231008	Akanksha Singh	Calculator App	Dr. Affila Yauav
68	200231029	Isha Agrawal		
69	200231065	Shubham Chaurasia		
70	200231036	Monisha Chaurasia	Health Workforce	Duet Neverdue Kabli
71	200231015	Antra Tiwari	Data visualization	Prof. Narendra Kohli
72	200231020	Aviral Dixit		
73	200231010	Akshay Dhingra		
74	200231026	Harsh Bhatnagar	Nifty Fifty	Dr. V.D. Kaushik
75	200231055	Sachin Pratap Singh	Predictor	DI. V.D. Kausilik
76	200231070	Somesh Tiwari		

## User Chat Analysis using Machine Learning

A Project Report Submitted
In Partial Fulfilment of the Requirements
For the Award of the Degree of
Bachelors of Technology

In

Computer Science and Engineering

By

Harshit Jain

(Enrollment No: HBTU180104027)

Akshat Sachan

(Enrollment No: HBTU180104010)

Ashutosh Trivedi

(Enrollment No: HBTU180104018)

Ajit Jain

(Enrollment No: HBTU180104061)

Under the supervision of

Dr. Narendra Kohli

Professor

Department of Computer Science and Engineering,



To the School of Engineering Harcourt Butler Technical University, Kanpur (May, 2022)

## SIGN LANGUAGE RECOGNITION SYSTEM

A Project Report Submitted in Partial Fulfillment of the requirements for the Award of the Degree of Bachelors of Technology in Computer Science and Engineering

Under the Supervision of-

Dr. Narendra Kohli
Head of Department
Department of Computer Science and Engineering,
Harcourt Butler Technical University, Kanpur

By-Aakriti Sahrawat (180104002) Abhinav Mehrotra (180104004) Samyak Srivastava (180104046) Amit Singh (180110013)



To The
School of Engineering
Harcourt Butler Technical University, Kanpur
(Formerly Harcourt Butler Technological Institute, Kanpur)
(June, 2022)

#### DRIVER DROWSINESS DETECTION SYSTEM

A Project Report Submitted In Partial Fulfilment of the Requirements For the Award of the Degree of

#### **Bachelors of Technology**

In

Computer Science and Engineering By

Garima Singh Bhadauria

(Enrollment No: HBTU180104024)

Shivangi Dubey

(Enrollment No: HBTU180104052)

Vishal Anand

(Enrollment No: IIBTU180104058)

Mokshin Koul

(Enrollment No: HBTU180104064)

Under the Supervision of Dr. Raghuraj Singh Professor

Department of Computer Science and Engineering, Harcourt Butler Technical University, Kanpur



To the School of Engineering Harcourt Butler Technical University, Kanpur (Formerly Harcourt Butler Technological Institute, Kanpur) (June, 2022)

## AUTOMATED DRIVER-ASSISTANCE SYSTEM

A Project Report Submitted In Partial Fulfillment of the Requirements For the Award of the Degree of

#### **Bachelors of Technology**

In

Computer Science and Engineering

By

Ansh Shanker

(Enrollment No: HBTU180104015)

Arpit Malik

(Enrollment No: HBTU180104016)

Rishpreet Singh

(Enrollment No: HBTU180104041)

Utkarsh Tiwari

(Enrollment No: HBTU180104057)

Under the Supervision of Dr. Raghuraj Singh Professor

Department of Computer Science and Engineering, Harcourt Butler Technical University, Kanpur



To the
School of Engineering
Harcourt Butler Technical University, Kanpur
(Formerly Harcourt Butler Technological Institute, Kanpur)
(June, 2022)

## Tree Born- Hear The Echo Application

A Project Report Submitted In Partial Fulfilment of the Requirements For the Award of the Degree of

## **Bachelor of Technology**

COMPUTER SCIENCE AND **ENGINEERING** 

By

Krishnam Dhawan

(Enrollment No: HBTU180104034)

Prateek Goel

(Enrollment No: HBTU180104037)

Shivam Nehra

(Enrollment No: HBTU180104051)

Aman Singh

(Enrollment No: HBTU180104062)

Under the supervision of

Dr. Anita Yadav

Associate Professor

Department of Computer Science and Engineering, Harcourt Butler Technical University, Kanpur



To the

School of Engineering Harcourt Butler Technical University, Kanpur

(Erstwhile Harcourt Butler Technological Institute, Kanpur)

### "Image Caption Generator"

A Project Report Submitted

In Partial Fulfillment of the Requirements

For the Degree of

#### **Bachelor of Technology**

In

Computer Science and Engineering

by

Vivek Verma (HBTU180104059)

Yaman Varshney (HBTU18010460)

Ishank Katiyar (HBTU180104030)

Sameer Garg (HBTU180104044)

Under the Supervision of

Dr. Anita Yadav

Associate Professor

Harcourt Butler Technical University,

Kanpur



To

School of Engineering

Harcourt Butler Technical University, Kanpur (Formerly Harcourt Butler Technological Institute, Kanpur)

(June 2022)

## RICE GRAIN QUALITY ANALYSIS USING IMAGE PROCESSING

A Project Report Submitted in Partial Fulfillment of the requirements for the Award of the Degree of Bachelors of Technology in Computer Science and Engineering

Under the Supervision of-

#### Dr. PRABHAT VERMA

Assistant Professor

Department of Computer Science and Engineering,
Harcourt Butler Technical University, Kanpur

By-Aditya Dixit(180104007) Abhishek Singh(180104006) Deepanshu(180104023) Samir Yadav (180104045)



To The
School of Engineering
Harcourt Butler Technical University, Kanpur
(Formerly Harcourt Butler Technological Institute, Kanpur)
(June, 2022)

٨

Project Report

on

# AUTOMATIC NUMBER PLATE RECOGNITION SYSTEM

Submitted in partial fulfilment of the requirement

For the award of Degree of

# Bachelor of Technology

Computer Science and Engineering

Under the supervision of Dr. Prabhat Verma (Assisstant Proffessor) HBTU Kanpur

#### By:

Aakriti Kaithwas(180104001) Vishal Singh(170104063) Abhay(180104003) Abhishek Kamal(180104005)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING Harcourt Butler Technical University, Kanpur, 208002 (2021-2022)

# MUSIC RECOMMENDATION SYSTEM BASED ON FACIAL EMOTION RECOGNITION

A Project Report Submitted

In Partial Fulfillment of the Requirements For the Award of the Degree of

Bachelors of Technology

In

Computer Science and Engineering

By

Deepika Juneja

(Enrollment No: HBTU180110028)

Shashwat Agarwal

(Enrollment No: HBTU180104048)

Pradyumn Maurya

(Enrollment No: HBTU180105018)

Deepak Pratap Seth

(Enrollment No: HBTU180104022)

#### UNDER THE SUPERVISION OF

Dr. Vandana Dixit Kaushik

Assistant Professor, Department of Computer Science and Engineering Harcourt Butler Technical University, Kanpur



To the

School of Engineering

Harcourt Butler Technical University, Kanpur (Formerly Harcourt Butler Technological Institute, Kanpur) (May, 2022)

#### Project Report

On

## LOAN APPROVAL USING MACHINE LEARNING AND DATA MINING.

Submitted in partial fulfillment of the requirement for

Degree of Bachelor of Technology in

Computer Science and Engineering

Under the supervision of

Dr. Vandana Dixit Kaushik

(Assistant Professor & Supervisor)

**HBTU Kanpur** 

By:

Deeksha Lala (180104020)

Priyanshi Agrawal (180104038)

Sakshi Agarwal (180104043)

Stuti Saini (180104054)



# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING HBTU KANPUR - 208002 2021-2022

#### CRITIQUE

A Project Report Submitted In Partial Fulfillment of the Requirements For the Award of the Degree of

## Bachelors of Technology

ln

Information Technology

By

Atul Bharti

(Enrollment No: HBTU180108009)

Divya Kumar Jaiswal

(Enrollment No: HBTU180108014)

**Hemant Kumar Patel** 

(Enrollment No: HBTU180108016)

Sanskrati Gupta

(Enrollment No: HBTU180108025)

Under the supervision of Dr. Narendra Kohli Professor & Hlad

-Head of Department

Computer Science and Engineering Department, Harcourt Butler Technical University, Kanpur



School of Engineering

Harcourt Butler Technical University, Kanpur (Formerly Harcourt Butler Technological Institute, Kanpur) (May, 2022)

1

## Indian sign language Detection using Machine Learning

A Project Report Submitted
In Partial Fulfillment of the Requirements
For the Award of the Degree of

# Bachelors of Technology

In

Information Technology

By

Priyakant Panwar

(Enrollment No: HBTU180108031)

Balram Verma

(Enrollment No: HBTU180108013)

Akshit Singh

(Enrollment No: HBTU180108001)

**Abhay Patel** 

(Enrollment No: HBTU170108002)

Under the supervision of Dr. Narendra Kohli

Professor, 2 Hand

#### Head Of The Department

Department of Computer Science and Engineering, Harcourt Butler Technical University, Kanpur



To the
School of Engineering
Harcourt Butler Technical University, Kanpur
(Formerly Harcourt Butler Technological Institute, Kanpur)
(May, 2022)

#### ANALYSIS OF CORONARY ARTERY DISEASE USING VARIOUSMACHINE LEARNING TECHNIQUES

A Project Report Submitted In Partial Fulfillment of the Requirements For the Award of the Degree of

#### Bachelors of Technology

In Information Technology By

Ritik Kumar Nayak
(Enrollment No: HBTU180108023)
Rishabh R. Chaudhary
(Enrollment No: HBTU180108022)
Mohak Nigam
(Enrollment No: HBTU180108019)
Rajyardhan Singh
(Enrollment No: HBTU180108021)

Under the supervision of

Prof.Raghuraj Singh

Department of Computer Science and Engineering,

Harcourt Butler Technical University, Kanpur



To the
School of Engineering
Harcourt Butler Technical University, Kanpur
(June, 2022)

## Web Scraper

A Project Report Submitted In Partial Fulfillment of the Requirements For the Award of the Degree of

## **Bachelors of Technology**

In Information Technology By

Ankesh Ojha
(Enrollment No: HBTU180108007)
Ashutosh Bhalothia
(Enrollment No: HBTU180108008)
Sachin Kumar
(Enrollment No: HBTU180108024)
Amrendra Singh
(Enrollment No: HBTU180108005)

Under the supervision of

Prof.Raghuraj Singh Department of Computer Science and Engineering, Harcourt Butler Technical University, Kanpur



To the
School of Engineering
Harcourt Butler Technical University, Kanpur
(Formerly Harcourt Butler Technological Institute, Kanpur)
(May, 2022)

## Cattle Care Application

A Project Report Submitted In Partial Fulfillment of the Requirements For the Award of the Degree of

## Bachelor of Technology

In

## INFORMATION TECHNOLOGY

By

Milind Kaushal

(Enrollment No: HBTU180108018)

Divyansh Tripathi

(Enrollment No: HBTU180108015)

Saumya Rastogi

(Enrollment No: HBTU180108026)

Under the supervision of

Dr. Anita Yaday

Associate Professor

Department of Computer Science and Engineering, Harcourt Butler Technical University, Kanpur



To the

School of Engineering
Harcourt Butler Technical University, Kanpur
(Erstwhile Harcourt Butler Technological Institute, Kanpur)

1

## **Emotion Recognition and Depression Detection**

A Project Report Submitted

By-

Alankrita Mishra(180108002)

Shipra Roy(180108027)

Yukti Gangwar(180108030)

Under the supervision of-

Dr. Prabhat Verma

(Assistant Professor, Department of Computer Science and Engineering)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR.

Project Report On

### STOCK MARKET PREDICTION

Submitted
In partial fulfilment of requirements
for the degree of

Bachelor of Technology

IN

INFORMATION TECHNOLOGY



By

ANKESH KUMAR (180108006) AMIT KUMAR PATEL (180108004) TAQUIUDDIN (180108028) ALOK DIWEDI (180108003)

Under the supervision of

Dr. Prabhat Verma

Assistant Professor, CSE

#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING H.B.T.U, KANPUR

#### PROJECT SUPERVISOR

Dr. Prabhat Verma

Assistant Professor
Department of
Computer Science and Engineering

#### PROJECT IN-CHARGE

Dr. Raghuraj Singh

Professor

Department of

Computer Science and Engineering

## **Automated Rating of Online Reviews**

A Project Report Submitted In Partial Fulfillment of the Requirements For the Award of the Degree of

## **Bachelor of Technology**

ln

#### INFORMATION TECHNOLOGY

By

Rajat Aggarwal

(Enrollment No: HBTU180108032)

Vaibhay Tripathi

(Enrollment No: HBTU180108029)

Pragya Katiyar

(Enrollment No: HBTU180108020)

Kapil Kumar Dwivedi

(Enrollment No: HBTU180108017)

Under the supervision of

Dr. Vandana Dixit Kaushik

**Assistant Professor** 

Department of Computer Science and Engineering, Harcourt Butler Technical University, Kanpur



To the

School of Engineering

Harcourt Butler Technical University, Kanpur

(Erstwhile Harcourt Butler Technological Institute, Kanpur)

## Personality Prediction Using CV Analysis

A Project Report Submitted

In Partial Fulfillment of the Requirements For the Award of the Degree of

Bachelors of Technology In

Information Technology By

Avantika Singh Parihar (Enrollment no: HBTU180108010) Avinash Dixit (Enrollment No: HBTU180108011) Ayushi Jaiswal

Under the supervision of

(Enrollment No: HBTU180108012)

Dr. Vandana Dixit Kaushik Assistant Professor

Department of Computer Science and Engineering, Harcourt Butler Technical University, Kanpur



To the School of Engineering

HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

(Formerly Harcourt Butler Technological Institute, Kanpur) (May 2022)

# Project Report On Health Workforce Data Visualization

Submitted in partial fulfillment of requirement for the award of

## Master of Computer Applications

Under the guidance of

Dr. Narendra Kohli (Head of Department)

By

Aviral Dixit	(Roll No. 200231020)
Antra Tiwari	(Roll No. 200231015)
Monisha Chaurasia	(Roll No. 200231036)
Shubham Chaurasia	(Roll No. 200231065)



Department of Computer Science & Information Technology

HARCOURT BUTLER TECHNICAL UNIVERSITY

Kanpur, Uttar Pradesh

#### Project Report on SENTIMENT ANALYSIS OF PRODUCT-BASED REVIEWS

# Submitted in particular fulfillment of the requirement for the degree of

### MASTER OF COMPUTER APPLICATION

## Under the esteemed guidance of Prof. NARENDRA KOHLI

Professor & Head By

AAKASH GAUR	(Roll no. 200231001)
AJAY KUMAR VERMA	(Roll no. 200231007)
ANURAG SINGH	(Roll no. 200231016)
AYUSHI VERMA	(Roll no. 200231021)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR (2022)

## Comparative Study Amazon Apparel Recommendation System

Dissertation submitted in partial fulfillment of the requirements for the degree of

## Master of Computer Application (MCA)

By

Akshika Mittal (200231011)

Mohd Shadab (200231035)

Tuba Khan (200231075)

Shivangi (200231064)

Under the guidance of

Prof. Raghuraj Singh



# Harcourt Butler Technical University Academic Year 2021-22

# EMOTION DETECTION THROUGH SPEECH

A Project Report Submitted In Partial Fulfilment of the Requirements For the Award of the Degree of

#### MASTER OF COMPUTER APPLICATION

In

Computer Science

By

Neha Singh

(Enrollment No: HBTU200231038)

Harshit Shukla

(Enrollment No: HBTU200231027)

Prabhat Kumar Tiwari

(Enrollment No: HBTU200231043)

Under the supervision of
Dr. Raghuraj Singh
Professor
Department of Computer Science and Engineering,
Harcourt Butler Technical University, Kanpur



To the

School of Engineering

Harcourt Butler Technical University, Kanpur (Formerly Harcourt Butler Technological Institute, Kanpur)

## A project Report

## ON

## Malicious Node Detection in Wireless Network

#### MASTER OF COMPUTER APPLICATIONS

### Submitted By:

Lokesh Katiyar (200231033) Kamal Nayan Rai (200231031) Pransu Katiyar (200231046) Rishabh Verma (200231053)

> Under the Guidance of Dr. Anita Yadav (Associate Professor)



HARCOURT BUTLER TECHNICAL UNIVERSITY KANPUR, 208002, U.P.

## Distance Calculator App

# Dissertation submitted in partial fulfillment of the requirements for the degree of

### MASTER OF COMPUTER APPLICATIONS

By

Manali Sharma (200231034)

Akanksha Singh (200231008)

Priya Katiyar (200231048)

Isha Agrawal (200231029)

Under the esteemed guidance of

Dr. Anita Yadav



HARCOURT BUTLER TECHNICAL UNIVERSITY KANPUR.208002,INDIA MAY 2022

### SALES PREDICTION OF SUPERMARKET

Project Report Submitted in Partial Fulfillment of the Requirement for the Degree of

## MASTER OF COMPUTER APPLICATION 2020-2022

Under the guidance of

Prof. Prabhat Verma

By:

Nivedita Jain (200231039) / 06

Avani Singh (200231019) / 06

Pratibha Vishwakarma (200231047) / 06

Dheeraj Tiwari (200231024) / 06



Department of Computer Science and Engineering Harcourt Butler Technical University Kanpur, U.P

## PROJECT REPORT

#### ON

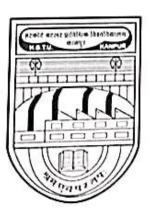
## STOCK PRICE PREDICTION SYSTEM

Submitted in the Partial fulfilment of requirement for the award of

# MASTER OF COMPUTER APPLICATION

## Under the guidance of Dr. Prabhat Verma (Professor CSE Department)

Aman Kant Savita (Roll no. 200231012)
Chirag Papneja (Roll no. 200231023)
Prabhat Kumar Kohliyan (Roll no. 200231042)
Rahul Mohan (Roll no. 200231051)



Department of Computer Science and Engineering Harcourt Butler Technical University June 2022

# **EMOJIFIER USING CNN**



A project report submitted to
Harcourt Butler Technical University
Kanpur, U.P.
towards partial fulfilment of
the degree of

# MASTER OF COMPUTER APPLICATION 2020-2022

#### Guided by:

Dr. V.D. Kaushik

Assistant Professor

C.S.E. Department

#### Submitted by:

Shubham Logani (200231066)

Prachi Gupta (200231044)

Kushagra Verma (200231032)

#### Submitted to:

Dr. Anita Yaday

Associate Professor

C.S.E. Department

## **KARKINOS**

Brain Tumor Detection Using Deep Learning Models

Dissertation submitted in partial fulfillment of the requirements for the degree of

# MASTER OF COMPUTER APPLICATION By

Vartika Jaiswal (200231078) Sushant Baghel (200231074) Navjyot Kumar (200231037) Suryansh Singh (200231073)

Under the esteemed guidance of

Dr. V.D. Kaushik Assistant Professor



Department of Computer Science and Engineering
Harcourt Butler Technical University
Kanpur, U.P.

Session: 2020-2022

#### Internship Report

#### A Project Report Submitted

In Partial Fulfillment of the Requirements for the Award of the Degree of

Master of Computer Application (MCA)

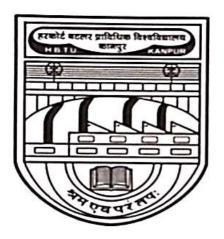
(2019-2022)

Ву

ANSHIKA GOVIL

(Enrollment Number: HBTU190231012)

Under the supervision of SAMSUNG DATA SYSTEMS INDIA PVT. LTD.



To The

School of Engineering

Harcourt Butler Technical University, Kanpur

(June,2022)

#### CERTIFICATE OF INTERNSHIP

Sender : Anuj Sharma < s.anuj@samsung.com > Professional/HR Group/SDS India

Date: 2022-05-18 13:13 (GMT+5:30)

Title: Samsung Data Systems - Interns Candidate Status - Harcourt butler technical university (HBTU)

To: null < Placement@hbtu.ac.in >

CC: Suresh Chander < s.chander@samsung.com>

Dear TPO,

Hope you're doing good ..!

Please refer the below table -

S.No.	Name	Institut e	Degree	Branch	Mobile	Email Address	Start Date	Internship End
28	Anshika Govil	нвті	B.Tech	Computer Application	8743939908	govilanshika2@gmsil.com	Feb 01, 2022	June 30, 2022

#### Regards

#### Anuj Sharma

Human Resource / Manager

Samsung Data Systems India Private Limited

T+91-124-418-1234, M+91-90-1575-5566

Esanuj@samsung.com

in:-linkedin.com/in/anujlinkin/

https://www.samsungsds.com/india/en/

## Internship's Tasks

A Project Report Submitted

In Partial Fulfilment of the Requirements for the Award of the Degree of

Master of Computer Application

(2019-2022)

By

Deepak Mishra

(Enrolment No: HBTU190231024)

Under the Supervision of

Mr. Chintan Gupta



## School of Engineering

Harcourt Butler Technical University, Kanpur

(Formerly Harcourt Butler Technological Institute, Kanpur)

Academic Year: 2021-2022

## CERTIFICATE



Date: 07/05/2022

### To Whom It May Concern:

This is to certify that <u>Deepak Mishra</u> S/O Mr. Ganga Sagar Mishra who is the student of MCA final Uyear (Roll Number: 190231024) from Harcourt Butler Technical University, Kanpur has done his Internship Program from Our Organization <u>HP Internship India From 05 Feb 2022</u> to **05 July 2022** in Kanpur.

His Internship is based on Java.

During the internship period <u>Deepak Mishra</u> has shown keen interest in project development and analysis phase and to the best of our knowledge. He has shown sound knowledge of the subject and has good grasping power.

For HP Internship India

Mr. Chintan Gupta (Project Manager)

www.InternshipIndia.in

## Internship's Tasks

A Project Report Submitted In Partial Fulfillment of Requirements For the Award of the Degree of

## Master of Computer Application

(2019-2022)

Ву

Arpit Raghubansi

(Enrolment No: HBTU190231013)

Under the Supervision of

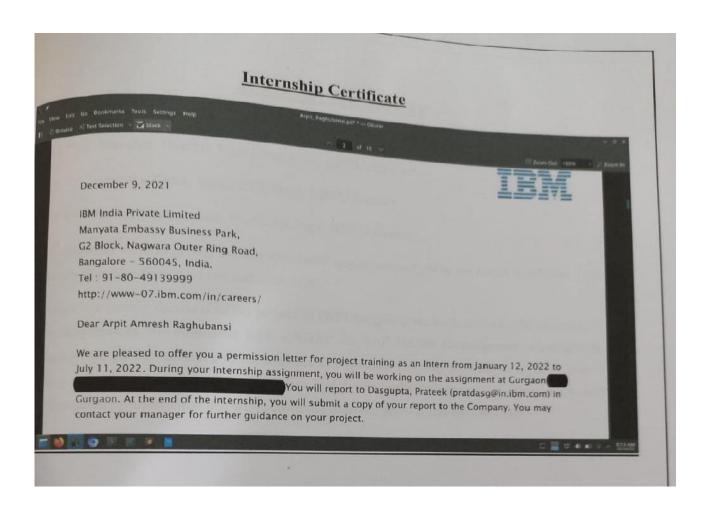
Mr. Prateek Das Gupta Mrs. Rekha Satyanath



To the School of Engineering

Harcourt Butler Technical University, Kanpur

June, 2022



# Internship's Tasks

# A Project Report Submitted

In Partial Fulfilment of Requirements for the Award of the Degree of

# **Master of Computers Application**

(2019-2022)

By

Smriti Gupta (Enrollment No: HBTU190231035)

Under the Supervision of

Nagarro (thinking break through), Gurgaon.

Mr.OM Prakash Miss Parul Parmar



School of Engineering
Harcourt Butler Technical University, Kanpur
(Formerly Harcourt Butler Technological Institute,
Kanpur)

(June 2022)

## CERTIFICATE



# TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Smriti Gupta** joined Nagarro Software Pvt. Ltd. on 09<sup>th</sup> March,2022 fora six-month training. She has been working on Java language and her performance has been satisfactory.

Her project is handled by Swati Yadav from the People Enablement team.

Swati Yadav

Director, People

EnablementNagarro

Software Pvt. Ltd.

## SMART PLANNING AND EXECUTION APP PROCESS DOCUMENT

A Project Report Submitted

In Partial Fulfilment of the Requirements for the Award of the Degree of

Master of Computer Application

(2019-2022)

By

Kajul Sharma

(Enrollment No: HBTU190231032)

Under the Supervision of

Mr. Sumit Dwivedi



School of Engineering

Harcourt Butler Technical University, Kanpur
(Formerly Harcourt Butler Technological Institute,
Kanpur)

June 4, 2022



# TO WHOMSOEVER IT MAY CONCERN

This is to certify the Ms. Kajul Sharma of MCA - Harcourt Butler Technical University, Kanpur is doing internship at Yamaha Motor Solutions India Ltd. since 14" February 2022 .

For.

Yamaha Motor Solutions India Pvt Ltd

ivagentia Rawai

DGM - HR

YAMAHA MOTOR SOLUTIONS (INDIA) PRIVATE LIMITED

19 6 Martine Food Faridabad, Haryana - 121008, India Phone -91 12+ 0006595, Fax +91-129-4013957

No. Netry Place Behind IFCI Tower, New Delhi — [10019, India Pt. 19-11-11802255 | Fax: +91-11-41802200 Line: Vinelinyaniaha-motor-india som Line: | Mito://www.ymst.in/ CBLL17900001.7007FTC118736

Total Quality with Team Powe

# ONLINE PARKING SYSTEM

# A Project Report

Submitted in fulfilment of the Requirement for the award of the degree of

# Master of Computer Applications

(Batch 2019- 2022)

To



By

Pramod Kumar Chauhan (190231049)

Under the Supervision Of

Mr. Shubham Yadav

# CERTIFICATE



## MIDBRAINS TECHNOLOGIES

### Address

2<sup>nd</sup> floor, Uttam Shanti building above Yamaha Showroom near Pandit Petrol Pump Dange chowk, Hinjewadi, Pume, Maharashtra 411033

### Email

info@midbrains.in

### Website

www.midbrains.in

### Offer Letter

Date: 31/12/2021

Dear Pramod Kumar Chauhan,

We refer to the discussions held with you earlier and take pleasure in offering you as a Full Stack Developer Intern in our organization. You are requested to join us on 03-January-2022. Your job specifications will be provided to you separately.

We shall be offering you internship duration of 6 months with no stipend as discussed mutually at the time of interview you had with us. All other benefits will be as per the existing policy of an organization for which you will be entitled upon your joining the organization.

This appointment is offered to you based on the information provided by you in writing and during the course of subsequent correspondence and meetings. In the event of any of the information being proved to be incorrect, the organization will view it seriously and take appropriate action.

We look forward to a very rewarding mutual relationship to the benefit of yourself and the company.

Yours faithfully,

**HR** Department

# Internship's Tasks

A Project Report Submitted

In Partial Fulfillment of the Requirements For the Award of the Degree of

Master of Computer Application

(2019-2022)

By

Rajat Pal

(Enrollment No: HBTU190231052)

Under the Supervision of

Ms. Nainshree Joshi



School of Engineering

Harcourt Butler Technical University, Kanpur (Formerly Harcourt Butler Technological Institute, Kanpur)

June 4, 2022



STRICTLY CONFIDENTIAL

Dated: 31st May, 2022

hr@celebaltech.com enterprisesales@celebaltech.com

1 www.celebaltech.com

0141-4700659

India: A-2 7th floor, UDB Corporate Tower, J.L.N. Marg, Jaipur

# Ongoing Internship Certificate

# To Whomsoever It May Concern

This is to certify that **Rajat Pal** had undertaken Internship with Celebal Technologies, Jaipur, starting from 1st January 2022 in **Big Data & EDW** Department.

During his 5 months of Internship, he was working under the mentorship of Ms. Nainshree Joshi.

Best Regards

Teyal

Tejal Mangal Sr. Executive Human Resources Celebal Technologies

### Project Report

### Submitted

In Partial Fulfilment of the Requirements for the Award of the Degree of

### Master of Computer Application (MCA)

(2019-2022)

Ву

Aarzoo Rathi

(Enrolment No: HBTU190231034)

Under the Supervision of

Mr Praveen Jaiswal



Harcourt Butler Technical University, Kanpur

## Certificate of Internship



Date: 02nd May 2022

### TO WHOM SO EVER IT MAY CONCERN

This is to certify that Ms. Aarzoo Rathi Roll No:- 190231034, a student of Master of Computer Application from Harcourt Butler Technical University Kanpur, has successfully completed her 3 months (01 Feb to 30 Apr) long internship at Tycho Technologies Pvt. Ltd.

During her internship she has worked on the project entitled "E-commerce" for Flutter Development the work responsibilities performed by Ms. Aarzoo Rathi was to develop Frontend, the project developed for Android and iOS device. It is original work done by Ms. Aarzoo Rathi under the guidance of Mr. Praveen Jaiswal.

We wish her success in life.

Warm Regards,

Nidhi Singh

Tycho technologies Pvt. Ltd.

Tycho Technologies Pvt. Ltd. 802 Basement, H-182 Sec-63, Noida 201309, Mobile: 9650982333

# **Municipal Corporation Online Complaint Handling Process**

A Project Report Submitted In Partial Fulfillment of the Requirements for the Award of the Degree of

Master Of Computer Application (2019-22)

By:

ASHUTOSH TRIPATHI

(Enrollment No. HBTU190231016)

Under the Supervision of Mr. Sanjay Shelar



Harcourt Butler Technical University

To the

School of Engineering

Harcourt Butler Technical University, Kanpur (Formerly Harcourt Butler Technological Institute, Kanpur) (June, 2022)



Office Address: 04th floor, S. M. Tower, Above Jijamata bank, Karvenagar, Pune-411052. E-mail: info@webhub.co.in. Website. www.webhub.co.in.

REF: INT-webhub295-2022

Date: 02/06/2022

## TO WHOM IT MAY CONCERN

This is to certify that Mr. Ashutosh Tripathi student of MCA from Harcourt Butler Technical University has successfully completed a project on "Municipal Corporation Online Complaint Handling Process" as a partial fulfillment of requirement towards 06th semester of his MCA program.

Duration- 02nd Feb 2022 to Till Completion.

Technology- Java and MYSOL

During the period of internship with us he was found punctual, hardworking and inquisitive.

As abided by intellectual property and confidentiality policy of Webhub Technology Pune. He is unable to produce the source code of above mentioned project.

We wish his every success in life.

Del Const

YOURS SINCERELY,

FOR WEBHUB TECHNOLOGY PUNE

www.webhub.co.in

# SIGN LANGUAGE TO TEXT CONVERSION FOR DEAF AND DUMB

A Project Report Submitted
In Partial Fulfillment of the Requirements
For the Award of the Degree of
Master of Computer Application
(2019-2022)

By

Sagarika Jaiswal

(Enrollment No: HBTU190231058)

Under the Supervision of

Mr. Arjun Tiwari

Mr. Ritesh Sachan



To the
School of Engineering
Harcourt Butler Technical University, Kanpur
(Formerly Harcourt Butler Technological Institute, Kanpur)
(June 4, 2022)



150 9001 2008 1 T No:GACB1998

Regd. By U.F. Govt. Regd. No.-K-816

2/5, (M.I.G.) BARRA-7, KANPUR

Ph.: 0512-3291639 Mo.: 9889999106

## TO WHOM SO EVER IT MAY CONCERN

This is to certify that Miss. Sagarika Jalswal has completed a supervised and mentored internship as an intern at Sky Base Computer Institute.

Duration - three months from 1 Eet 2032 to 10" May, 2022.

She has majorly worked on various machine learning & deep learning algorithms. During her internship benon she was exposed to various processes and was found sincere, hard working technically sound and result oriented.

Her association with us is much appreciated and we wish her all the best her future endeavors.



# **COW DUNG BASED PAINT**

# A TECHNO-ECONOMIC FEASIBILITY REPORT

Submitted in partial fulfillment of the requirements for the award of the degree of

## **BACHELOR OF TECHNOLOGY**

in

## PAINT TECHNOLOGY

by

Adhish Srivastav (180113004)

Dev Tiwari (180113007)

Jaya (180113012)

Under the supervision of

DR. P.K KAMANI



DEPARTMENT OF PAINT TECHNOLOGY
HARCOURT BUTLER TECHNICALUNIVERSITY
KANPUR, INDIA (208002)

## WATER BASED THEMOPLASTIC ROAD MARKING PAINT

### A TECHNO FEASIBILITY REPORT

Submitted in partial fulfillment of requirements

for the degree of

# BACHELOR OF TECHNOLOGY CHEMICAL TECHNOLOGY-PAINT TECHNOLOGY

BY

Yash Shori (SR NO. 180113030)

Shikhar Verma (SR NO. 180113023) Mo Gulfam (SR NO. 180113013)

UNDER THE SUPERVISION OF

DR. PRAMOD KUMAR KAMANI

PROFESSOR, DEPARTMENT OF PAINT TECHNOLOGY



TO

THE DEPARTMENT OF PAINT TECHNOLOGY
SCHOOL OF CHEMICAL TECHNOLOGY
HARCOURT BUTLER TECHNICAL UNIVERSITY
KANPUR-208002

# **COLOURED NITRO-CELLULOSE LACQUER**

## A TECHNO-ECONOMIC FEASIBILITY REPORT

Submitted in partial fulfillment of the requirements for the award of the degree of

## **BACHELOR OF TECHNOLOGY**

in

### **PAINT TECHNOLOGY**

Ву

Harshit Mishra (180113010)

Jagrati Sachan (180113011)

Rajat Saini (180113018)

Under the supervision of

Mr. M.I. Khan



DEPARTMENT OF PAINT TECHNOLOGY

HARCOURT BUTLER TECHNICAL UNIVERSITY

KANPUR, INDIA (208002)

# STYRENE-ACRYLIC EMULSION FLOOR COATING

A TECHNO-ECONOMIC FEASIBILITY REPORT

Submitted in partial fulfillment of the requirements

for the award of the degree of BACHELOR OF TECHNOLOGY

in

PAINT TECHNOLOGY

by

Abhishek Singh (180113003)

Shyam Singh (1604585028)

Mohd Ubaish Khan (180113015)

Under the supervision of

Dr. Arun Maithani

**Professor & Head, Department of Paint Technology** 



DEPARTMENT OF PAINT TECHNOLOGY
HARCOURT BUTLER TECHNICAL UNIVERSITY
KANPUR, INDIA (208002)

# A Project Report On CNSL RESIN BASED PAINTS

Submitted in partial fulfilment of requirements for the degree of

## BACHELOR OF TECHNOLOGY CHEMICAL TECHNOLOGY-PAINT TECHNOLOGY BY

## **UTKARSH TRIPATHI**

(University roll no. 180113028)

## **UDDHAV DUBEY**

(University roll no. 180113025)

### UTKARSH BAJPAI

(University roll no. 180113027)

Under the supervision of

## Mr. Ghanshyam

Guest Faculty, Department of Paint Technology



To

THE DEPARTMENT OF PAINT TECHNOLOGY SCHOOL OF CHEMICAL TECHNOLOGY HARCOURT BUTLER TECHNICAL UNIVERSITY KANPUR, INDIA-208002 2021-2022

# NITROCELLULOSE BASED WOOD SEALER A TECHNO-ECONOMIC FEASIBILITY REPORT

Submitted in partial fulfillment of the requirements for the award of the degree of

## **BACHELOR OF TECHNOLOGY**

in

## PAINT TECHNOLOGY

by

Sanjeev Pratap Rao (180113020)

Deepesh Singh(180113006)

Praveen kumar (170113018)

Mohd. Aakib (180113014)

Under the supervision of Mr.

M.I.Khan



DEPARTMENT OF PAINT TECHNOLOGY HARCOURT BUTLER TECHNICAL UNIVERSITYKANPUR, INDIA (208002)

## List of B.Tech. Project Academic Session 2021-22

Sr. No.	Roll No.	Name of Student	Topic of Project	Project guide
1	180105014	Kirtika Agrawal		Dr. Yaduvir Singh
2	180105021	Ragini Mishra	Regenerative Braking System of	
3	180105026	Shreya Tiwari	Electric Vehicle Driven by brushless	
4	180105034	Shiksha Dwivedi	D. C. Motor	
5	180105028	Suraj Singh		Dr. Yaduvir Singh
6	180105016	Nikhil Kumar Yadav	Smart Energy Meter using GSM	
7	180105003	Alka Rao		Mr. C.N. Singh
8	180105008	Ayush Singh	Model Order Reduction of Bilinear	
9	180105025	Shambhavi Singh	Systems	
10	180105027	Siddarth Sharma		
11	180105007	Apoorva Srivastava	Power Factor Improvement of 3	Mr. Jameel Ahamad
12	180105009	Deepak Kumar	phase Squirrel Cage Induction	
13	180105010	Humaid Ali Ansari	Generator Using Variable Capacitor	
14	180105030	Utkarsh Rastogi	Bank	
15	180105012	Jyoti Yadav		Dr. Yaduvir Singh
16	180105013	Krati Bharti	Face Recognition using Convolution	
17	180105017	Nikita Devi	Neural Network	
18	180105019	Pragya Yadav		
19	170105006	Ankit Singh		Dr. Archana Singh
20	180105006	Anupam Yaday	Reactive Power Compensation using	
21	180105022	Rakesh Yadav	Static Synchronous Series	
22	180105031	Vimlesh Kumar Maurya	Compensator	
23	180105002	Akash Deep Yadav		Dr. Archana Singh
24	180105005	Anil Kumar	Simulation of Linear controller of	
25	180105020	Prateek Verma	STATCOM for Reactive Power	
26	180105032	Vipin Kumar Chaudhary	Compensation	
27	180105011	Ishu Anand	Optimal Distributed Generation	Mr. Jameel Ahamad
28	180105024	Sahil Gupta	Allocation & Sizing in Distribution	
29	180105033	Yuvraj Singh	Systems using Artificial BEE Colony	
30	180105035	Shiyam Tiwari	Algorithm	
31	180105004	Aniket Verma		Mr. C.N. Singh
32	180105015	Mranal Bhikshu	Observer Based Control of Linear	
33	180105029	Surya Prakash	System	
34		Ritwik Singh	o.emre-acai	

Read. Electrical Engineering School of Engineering

### OBSERVER BASED CONTROL FOR LINEAR SYSTEM

In partial fulfilment of the requirements for the Degree of

Bachelor of Technology

### ELECTRICAL ENGINEERING



ANIKET VERMA (180105004) MRANAL BHIKSHU (180105015) SURYA PRAKASH (180105029) RITWIK SINGH (180107023)

Final B.Tech Electrical Engineering

Under the Guidance of

Mr. C.N. Singh

DEPARTMENT OF ELECTRICAL ENGINEERING

Harcourt Butler Technical University, Kanpur

PROJECT GUIDE

Mr. C.N. Singh

Dept. of Electrical Engineering

PROJECT IN-CHARGE

Mr. C.N. Singh

Associate Professor

Dept. of Electrical Engineering

School of Engineering

H. B. T. U. Kanpur

## CANDIDATE DECLARATION

This is to certify that the Project report which has been presented here entitled "Observer Based Control of Linear System" in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology and submitted to the Department of Electrical Engineering of H.B.T.U. Kanpur is an authentic record of our own work carried out under the guidance of Mr. C. N. Singh, Associate Professor, Department of Electrical Engineering, School of Engineering, H. B.T.U. Kanpur.

The matter embodied in this report has not been submitted by us for the award of any other degree or diploma.

Mranal Burgu MRANAL BHIKSHU (180105004)

Surya Protost SURYA PRAKASH (180105029)

RITWIK SINGH (180107023)

Final B.Tech. Electrical Engineering

This is certify that the above statement made by the candidates is correct to the best of

my knowledge.

Date: 12/07/2022

Project Guide

ON

### MODEL ORDER REDUCTION OF BILINEAR SYSTEMS

In partial fulfilment of the requirements

for the Degree of

Bachelor of Technology

In

ELECTRICAL ENGINEERING



ALKA RAO(180105003)

A YUSH SINGH (180105008)

SHAMBHAVI SINGH (180105025)

SIDDHARTH SHARMA (180105027)

Final B.Tech . Electrical Engineering

Under the Guidance of

Mr. C. N. Singh

Associate Professor

Department of Electrical Engineering

DEPARTMENT OF ELECTRICAL ENGINEERING

HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

PROJECT GUIDE

Mr. C.N. Singh

Associate Professor

Dept. of Electrical Engineering

PROJECT IN-CHARGE

Mr. C.N. Singh

Associate Professor

Dept. of Electrical Engineering

# CANDIDATE'S DECLARATION

This is to certify that the project report which has been presented here entitled "Model Order Reduction of Bilinear Systems" in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology and submitted in the Department of Electrical Engineering of H.B.T.U. Kanpur is an authentic record of our own work carried out under the guidance of Mr. C. N. Singh, Associate Professor, Department of Electrical Engineering, H.B.T.U. Kanpur.

The matter embodied in this report has not been submitted by us for the award of any other degree or diploma.

Adving ALKA RAO (180105003)

Ayush Singh (180105008)

Showhort SHAMBHAVI SINGH (180105025)

Showhort SIDDHARTH SHARMA (180105027)

Final R Task Element

Final B.Tech. Electrical Engineering

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Date: 29/06/222

Project Guide

on

#### FACE RECOGNITION USING CONVOLUTION NEURAL NETWORK

Submitted in partial fulfillment of the requirements for the Degree of

Bachelor of Technology

in

**Electrical Engineering** 



Fine

Jyoti Yadav (180105012) Krati Bharti (180105013) Nikita Devi (180105017) Pragya Yadav (180105019)

Final B. Tech Electrical Engineering

Under the Guidance of

Dr. Yaduvir Singh

Professo

Department of Electrical Engineerin

Harcourt Butler Technical University, Kanpur

PROJECT CHIDE

Dr. Yaduvir Singh Professor Dept. of Electrical Engineering PROJECT IN-CHARGE

Mr. C.N. Singh Associate Professor Dept. of Electrical Engineering

### CANDIDATE DECLARATION

This is to certify that the Project report which has been presented here entitled "Face Recognition Using Convolution Neural Network", is in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology and submitted in the Department of Electrical Engineering, H.B.T.U. Kanpur, is an authentic record of our own work carried out under the guidance of Prof.(Dr.)Yaduvir Singh, Professor, Harcourt Butler Technical University, Kanpur.

The matter embodied in this report has not been submitted by us for the award of any other degree or diploma.

Jyoti Jyoti Yadav/180105012

Krati Bharti/180105013

Nikita Nikita Devi/180105017

Gragya Pragya Yadav/180105019

Final B.Tech Electrical Engineering

This is to certify that the above statement is made by the candidates.

Date: 29-06-2022

Place: EED, HBTU, Kanpur

(Project Guide)

ON

### SMART ENERGY METER USING GSM

Submitted

In partial fulfilment of the requirements

Bachelor of Technology

In

#### FLECTRICALENGINEERING



By

SURAJ SINGH (180105028)

NIKSHI KUMAR YADA VUS0105016

Final B.Tech. Electrical Engineering

Under the Guidance of

Dr. Vaduvir Singh

Professo

Department of Electrical Engineering

DEPARTMENT OF ELECTRICALENGINEERING

PROTECT CHIDE

Dr. Yaduvir Singh

Professor

Dept. of Electrical Engineering

PROJECT IN-CHARGE

Mr. C.N. Singh

Associate Professor

Dept. of Electrical Engineering

### CANDIDATE DECLARATION

This is to certify that project report which has been presented here entitled "Smart Energy Meter Using GSM" in partial fulfilment of the requirements for the award of the Degree of Bachelor of Technology and submitted in the Department of Electrical Engineering of H.B.T.U. Kanpur is an authentic record of our own work carried under the guidance of Dr. Yaduvir Singh, Department of Electrical Engineering, H.B.T.U. Kanpur.

The matter embodied in this report has not been submitted by us for the award of any other degree or diploma.

Sway Lingh

Suraj Singh (180105028)

Nikhil Kumar Yadav (180105016)

Final B. tech Electrical Engineering

This is to certify that the above statement is made by the candidate.

Date: 29/06/2022

Dr. Yaduvir Singh

(Project Guide)

### OPTIMAL DISTRIBUTED GENERATION ALLOCATION AND SIZING IN DISTRIBUTION SYSTEMS USING ARTIFICIAL BEE COLONY ALGORITHM

Submitted

In partial fulfillment of the requirements for the Degree of

Bachelor of Technology

In

### ELECTRICAL ENGINEERING



ISHU ANAND (180105011) SAHIL GUPTA (180105024) YUVRAJ SINGH (180105033) SHIVAM TIWARI (180105035) Final B.Tech. Electrical Engineering Under the Guidance of Mr. JAMEEL AHAMAD Associate Professor

Department of Electrical Engineering

DEPARTMENT OF ELECTRICAL ENGINEERING HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

PROJECT GUIDE Mr. Jameel Ahamad Associate Professor Dept. of Electrical Engineering PROJECT IN-CHARGE Mr. C.N. Singh Associate Professor Dept. of Electrical Engineering

### CANDIDATE DECLARATION

This is to declare that the project progress report which has been presented here entitled "Optimal Distributed Generation Allocation and sizing in Distribution Systems by using Artificial Bee Colony Algorithm" in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology and submitted in the Department of Electrical Engineering of H.B.T.U. Kanpur is an authentic record of our own work carried under the guidance of Mr. Jameel Ahamad, Associate Professor, Department of Electrical Engineering, H.B.T.U. Kanpur.

The matter embodied in this report has not been submitted by us for the award of any other degree or diploma.

Ishu Anand

(180105011)

Sahil Gupta

(180105024)

Yuvraj Singh (180105033)

Shivan Tiwasi

Shivam Tiwari (180105035)

Final B.Tech Electrical Engineering

The above statement is made by the candidates.

Date:\3/07/2022

Mr. Jameel Ahamad Associate Professor

Department of Electrical Engineering

H.B.T.U Kanpur

ON

# POWER FACTOR IMPROVEMENT OF THREE PHASE SQUIRREL CAGE INDUCTION GENERATOR USING VARIABLE CAPACITOR BANK

Submitted In partial fulfilment of the requirement for the Degree of

**Bachelor of Technology** 

In

### ELECTRICAL ENGINEERING



Ву

APOORV SRIVASTAVA (Roll No.: 180105007)

DEEPAK KUMAR (Roll No.: 180105009

HUMAID ALI ANSARI (Roll No.: 180105010

UTKARSH RASTOGI (Roll No.: 180105030

### Final B.Tech. Electrical Engineering

Under the Guidance of

Mr. Jameel Ahamad

Associate Professor

Department of Electrical Engineering

DEPARTMENT OF ELECTRICAL ENGINEERING HARCOUT BUTLER TECHNICAL UNIVERSITY, KANPUR

PROJECT GUIDE

PROJECT IN-CHARGE

Mr. Jameel Ahamad

Mr. C. N. Singh

Associate Professor

Associate Professo

Dept. of Electrical Engineering

Dept. of Electrical Engineerin

### CANDIDATE DECLARATION

This is to declare that the report which has been presented here entitled "Power Factor Improvement of Three Phase Squirrel Cage Induction Generator using Variable Capacitor Bank" in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology and submitted in the Department of Electrical Engineering of H.B.T.U., Kanpur is an authentic record of our own work carried out under the guidance of Mr. Jameel Ahamad, Associate Professor, the Department of Electrical Engineering of H.B.T.U., Kanpur.

The matter embodied in this report has not been submitted by us for the award of any other degree or diploma.

Date:

Apoorv Srivastava (Roll no.: 180105007)

Deepak Kumar (Roll no.: 180105009)

Humaid Ali Ansari (Roll no.: 180105010)

Utkarsh Rastogi (Roll no.: 180105030)

Final B. Tech Electrical Engineering

The above statement is made by the students.

Mr. Jameel Ahamad

Associate Professor

Department of Electrical Engineering

H.B.T.U. Kanpur

ON

Simulation of Linear Controller of STATCOM for Reactive Power Compensation

Submitte

In pertial fulfilment of the manifesters

for the Deame o

Bachelor of Technology

In

**ELECTRICAL ENGINEERING** 



By

AKASHDEEP YADAV (18010500)

ANIL KUMAR (180105005

PRATEEK VERMA (180105020

VIPIN KUMAR CHAUDHARY (18010503)

Under the Guidance of

Dr. Archana Singh

Associate Professo

Department of Electrical Ecological

DEPARTMENT OF ELECTRICAL ENGINEERING
HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

PROJECT GUIDE

Dr. Archana Singh

Associate Professor

Dept. of Electrical Engineering

PRO JECT IN CHARGE

Mr. C.N. Singh

Associate Professo

Dept. of Electrical Engineering

## CANDIDATE DECLARATION

This is to certify that the report which has been presented here entitled "Simulation of Linear Controller of STATCOM for Reactive Power Compensation" in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology and submitted in the Department of Electrical Engineering of H.B.T.U., Kanpur is an authentic record of our own work carried out under the guidance of Dr. Archana Singh, Associate Professor, the Department of Electrical Engineering of

The matter embodied in this report has not been submitted by us for the award of any other degree or diploma.

Akashdeep Yadav (180105002)

Anil Kumat (180105005)

Prateck Verma (180105020)

Vipin Kumar (180105032) Vipin Kumar Chaudhary (180105032)

Final B. Tech Electrical Engineering

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Date: 29/06/2022

Dr Archana Singl

(Project Guide)

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PROJECT WORK

ON

DEVELOPMENT OF OLEOGEL AS A COCOA BUTTER REPLACER
IN CHOCOLATE

**SUBMITTED TO** 

HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

BACHELOR OF TECHNOLOGY

IN

CHEMICAL TECHNOLOGY
WITH SPECIALIZATION IN FOOD TECHNOLOGY

ABHISHEK KUMAR (ROLL NO. 180107003)
ADITYA SINGH (ROLL NO. 180107005)
AKASH JAISWAL (ROLL NO. 180107006)
AMAN KUMAR (ROLL NO. 180107007)

UNDER THE SUPERVISION OF: -



DEPARTMENT OF FOOD TECHNOLOGY
SCHOOL OF CHEMICAL TECHNOLOGY
HARCOURT BUTLER TECHNICAL UNIVERSITY
KANPUR – 208002 (UP) INDIA
2021-22



# हरकोटे बटलर प्राविधिक विश्वविद्यालय Harcourt Butler Technical University

(Formerly Harcourt Butler Technological Institute, Kanpur)

Phone +91-0512-2534001-5, Fax: +91-0512-2533812, Website: http://www.htmu.ac.in E-mail: vo@ntsu.ac.in

# **DEPARTMENT OF FOOD TECHNOLOGY**

## **CERTIFICATE**

This is to certify that Mr. ABHISHEK KUMAR, Mr. ADITYA SINGH, Mr. AKASH JAISWAL and Mr. AMAN KUMAR a student of B. Tech. Chemical Technology (with specialization in Food Technology) has worked under our supervision and guidance for the completion of his project report entitled "DEVELOPMENT OF OLEOGEL AS A COCOA BUTTER REPLACER IN CHOCOLATE" during the session 2021-2022.

He took keen interest in experimental work showing enthusiasm towards thorough and comprehensive study in preparation of this project report. We wish him a bright future and success all through his career.

(Dr. Pankaj Jha)

**Guest Faculty** 

Department of Food Technology

School of Chemical Technology

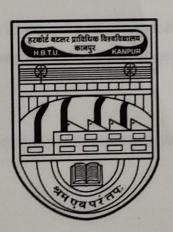
HBTU, Kanpur-208002

# A PROJECT REPORT ON STUDY OF CHOCOLATE BLOOM AND IT'S CONTROL

# THE PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE THE DEGREE OF BACHELOR OF TECHNOLOGY IN CHEMICAL TECHNOLOGY WITH SPECILIZATION IN FOOD TECHNOLOGY

#### SUBMITTED BY:

Aanya Tyagi 180107010 Ashish Kumar Yadav 180107012 Atul Kumar 180107013 Raj Choudhary 180107021



UNDER THE SUPERVISION OF
DR. PANKAJ JHA
DEPARTMENT OF FOOD TECHNOLOGY
HARCOURT BUTLER TECHNICAL UNIVERSITY
KANPUR 208002
2021-202



# हरकोर्ट बटलर प्राविधिक विश्वविद्यालय

## Harcourt Butler Technical University

Nawabganj, Kanpur-208002, U.P. (INDIA)

(Formerly Harcourt Butler Technological Institute, Kanpur)

Phone: +91-0512-2534001-5, Fax: +91-0512-2533812, Website: http://www.hbtu.ac.in E-mail: vc@hbtu.ac.in

#### **DEPARTMENT OF FOOD TECHNOLOGY**

#### **CERTIFICATE**

This is to certify that Ms. Aanya Tyagi, Mr. Ashish Kumar Yadav, Mr. Atul Kumar and Mr. Raj Choudhary, students of Final B.Tech Chemical Technology with specialization in Food Technology have worked under my supervision and guidance for the completion of their project entitle "STUDY OF CHOCOLATE BLOOM AND IT'S CONTROL" during the session 2021-2022

They took keen interest in experimental work showing enthusiasm comprehensive study in preparation of this project towards thorough and report.

I wish them a bright future and success all through their career.

Date: 01/07/2022

Place: Kanpur

(Dr. Pankaj Jha)

Assistant Professor Supervisor

Department of Food Technology

H.B.T.U.

#### RESEARCH PROJECT

ON

EFFECTS OF ROASTING ON QUALITY OF PEANUTS SUBMITTED TO

HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF

#### **BACHELOR OF TECHNOLOGY**

IN

CHEMICAL TECHNOLOGY WITH SPECIALIZATION IN FOOD TECHNOLOGY

By

RADHIKA AGARWAL (Roll No. 180107021) PRIYANSHU SRIVASTAV (Roll No. 180107020) PAWAN SHARMA (Roll No. 180107018) SHIVAM ANAND (180107026)

> Under the supervision of Dr. VIVEK KUMAR



DEPARTMENT OF FOOD TECHNOLOGY SCHOOL OF CHEMICAL TECHNOLOGY HARCOURT BUTLER TECHNICAL UNIVERSITY KANPUR-208002 (U.P.) INDIA

2021-22



## हरकोर्ट बटलर प्राविधिक विश्वविद्यालय

नवाबगंज, कानपुर-208002, उ०प्र०, (भारत)

## **Harcourt Butler Technical University**

Nawabganj, Kanpur-208002, U.P. (INDIA)

(Formerly Harcourt Butler Technological Institute, Kanpur)

Phone: +91-0512-2534001-5, Fax: +91-0512-2533812, Website: http://www.hbtu.ac.in E-mail: vc@hbtu.ac.in

#### DEPARTMENT OF FOOD TECHNOLOGY

#### CERTIFICATE

This is to certify that Ms. RADHIKA AGARWAL, Mr. PRIYANSHU SRIVASTAV, Mr. PAWAN SHARMA, Mr. SHIVAM ANAND a student of B. Tech. Chemical Technology (with specialization in Food Technology) has worked under my supervision and guidance for the completion of her dissertation report entitled "EFFECTS OF ROASTING ON QUALITY OF PEANUTS" during the session 2021-2022.

They took keen interest in experimental work showing enthusiasm towards thorough and comprehensive study in preparation of this project report.

I wish them a bright future and success all through him career.

Date: 2/07/2022

Place: Kanpur

(Dr. Vivek Kumar)

Assistant Professor and Supervisor

Department of Food Technology

H.B.T.U., Kanpur

PROJECT REPORT

ON

## STUDIES ON EXTRACTION AND CHARACTERIZATION OF TOMATO SEED OIL

SUBMITTED TO

HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

IN PARTIAL FULFILMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

#### BACHELOR OF TECHNOLOGY

IN

CHEMICAL TECHNOLOGY
WITH SPECIALIZATION IN FOOD TECHNOLOGY

By

ABHAY RAJ SACHAN (Roll No.180107002)
ANIMESH SAHU (Roll No.180101007)
KARTIKEY SHUKLA (Roll No. 180101018)
SUDHANSHU KUMAR (Roll No. 170107025)

Under the supervision of Dr. VIVEK KUMAR



DEPARTMENT OF FOOD TECHNOLOGY SCHOOL OF CHEMICAL TECHNOLOGY HARCOURT BUTLER TECHNICAL UNIVERSITY KANPUR-208002 (U.P.) INDIA 2021-22



# हरकोर्ट बटलर प्राविधिक विश्वविद्यालय

## Harcourt Butler Technical University

Nawabganj, Kanpur-208002, U.P. (INDIA)

(Formerly Harcourt Butler Technological Institute, Kanpur)

Phone: +91-0512-2534001-5, Fax: +91-0512-2533812, Website: http://www.hbtu.ac.in E-mail: vc@hbtu.ac.in

#### DEPARTMENT OF FOOD TECHNOLOGY

#### CERTIFICATE

This is to certify that Mr. Abhay Raj Sachan, Mr. Animesh Sahu, Mr. Kartikey Shukla and Mr. Sudhanshu Kumar are student of B. Tech. Chemical Technology (with specialization in Food Technology) has worked under my supervision and guidance for the completion of her dissertation report entitled "STUDIES ON EXTRACTION AND CHARACTERIZATION OF TOMATO SEED OIL" during the session 2021-2022.

They took keen interest in experimental work showing enthusiasm towards thorough and comprehensive study in preparation of this project report.

I wish them a bright future and success all through their career.

Date: 05/07/2022

Place: Kanpur

(Dr. Vivek Kumar)

Associate Professor and Supervisor Department of Food Technology

H.B.T.U., Kanpur

A

PROJECT REPORT

ON

Development of unripe banana cookies and it's quality evaluation

SUBMITTED TO

HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

IN PARTIAL FULFILMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

#### BACHELOR OF TECHNOLOGY

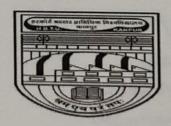
IN

CHEMICAL TECHNOLOGY
WITH SPECIALIZATION IN FOOD TECHNOLOGY

By
ANSHIKA MISHRA (Roll No. 180107011)
PRAGATI AWASTHI (Roll No. 180107010)

PRAGATI AWASTHI (Roll No. 180107019) SAMEEHA JHA (Roll No. 180107024) SAURABH (Roll No. 180107025)

Under the supervision of Dr. VIVEK KUMAR



DEPARTMENT OF FOOD TECHNOLOGY
SCHOOL OF CHEMICAL TECHNOLOGY
HARCOURT BUTLER TECHNICAL UNIVERSITY
KANPUR-208002 (U.P.) INDIA
2021-22



## हरकोर्ट बटलर प्राविधिक विश्वविद्यालय

नवाबगंज, कानपुर-208002, उ०प्र०, (भारत)

### **Harcourt Butler Technical University**

Nawabganj, Kanpur-208002, U.P. (INDIA)

(Formerly Harcourt Butler Technological Institute, Kanpur)

Phone: +91-0512-2534001-5, Fax: +91-0512-2533812, Website: http://www.hbtu.ac.in E-mail: vc@hbtu.ac.in

#### DEPARTMENT OF FOOD TECHNOLOGY

#### **CERTIFICATE**

This is to certify that Ms. Anshika Mishra, Ms. Pragati Awasthi Ms. Sameeha jha and Mr. Saurabh are student of B. Tech. Chemical Technology (with specialization in Food Technology) has worked under my supervision and guidance for the completion of her dissertation report entitled "Development of unripe banana cookies and it's quality evaluation" during the session 2021-2022.

They took keen interest in experimental work showing enthusiasm towards thorough and comprehensive study in preparation of this project report.

I wish them a bright future and success all through their career.

Date: 02/07/2022

Place: Kanpur

(Dr. Vivek Kumar)

Associate Professor and Supervisor

Department of Food Technology

H.B.T.U., Kanpur

## PROJECT REPORT

ON

"EXTRACTION AND UTILIZATION OF ESSENTIAL OIL RECOVERED FROM ORANGE PEEL"

SUBMITTED IN

PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF BACHELOR OF

**TECHNOLOGY** 

IN

**CHEMICAL TECHNOLOGY** 

(FOOD TECHNOLOGY)

**SUBMITTED BY** 

AYUSH SINGH (180107014) KUSHAGRA SRIVASTAVA (180107017) ISHAN GUPTA (180107016) SONU KUMAR (180107029)

FINAL B.TECH. CHEMICAL TECHNOLOGY (FOOD TECHNOLOGY)

**Under the Supervision of** 

Dr. ALAK KUMAR SINGH (HOD)
DEPARTMENT OF FOOD TECHNOLOGY



HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR-208002

SESSION: 2021-22

# HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR (U.P.)



## DEPARTMENT OF FOOD TECHNOLOGY

#### CERTIFICATE

This is to certify that the Project entitled, "THE EXTRACTION AND UTILIZATION OF ESSENTIAL OIL RECOVERED FROM ORANGE PEEL", being submitted by Ayush Singh(180107014), Ishan Gupta (180107016), Kushagra Srivastava (180107017), Sonu Kumar (180107029) for the partial fulfilment of the degree of Master of technology in chemical technology specialization in Food Technology of H.B.T.U., Kanpur, is a record of Bonafide research work carried out by her under my guidance and supervision during the session 2021-2022.

Date:

Prof. Alak Kumar Singh

Place:

30.6.2022\_ HBTUKanpur\_

Dept. of Food Technology

H.B.T.U., Kanpur-208002

## Certificate

This is to certify that the project entitled Design and Fabrication of Self Inflating tyre system submitted in the partial fulfillment of requirement for the award of degree of Bachelor of Technology in Mechanical Engineering, Harcourt Butler Technical University, Kanpur has been carried out by the following students under my supervision

Abhishek Kumar (180110001) Pandey

Divyarsh Pandey (180110031)

Prashant Jaiswal (180110044)

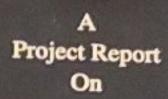
Rahul Kumar (180110048) Singh

(Dr. Vinay Pratap Singh)

Associate Professor

Department of Mechanical Engineering

HBTU, Kanpur



# Design and fabricatio n of Self Inflating Tyre System

Submitted in the partial fulfillment of award of Degree of Bachelor of Technology in

Mechanical Engineering
By
Abhishek Kumar Pandey (180110001)
Divyarsh Pandey (180110031)
Prashant Jaiswal (180110044)
Rahul Kumar Singh (180110048)

Under the Guidance of

Dr. Vinay Pratap Singh Associate Professor



Department of Mechanical Engineering
Harcourt Butler Technical University, Kanpur
June, 2022

# CERTIFICATE

This is to certify that Shubham Gupta (180112026), Ranjeet Kumar (180110050), Ashish Kumar (180110021), Mohit Singh (180110038) students of Final Year B.Tech. Mechanical Engineering, Harcourt "Thermodynamic Modeling and Analysis of Transpiration Cooled Gas Turbine Blade" under my supervision and guidance. The project report embodies the studies and work carried by students themselves.

(Dr. Onkar Singh)

Professor
Department of Mechanical,
Harcourt Butler Technical University,
Kanpur- 208002

Date:2506/2022

Place: Kanpur

A PROJECT REPORT

ON

Thermodynamic Modeling and Analysis of Transpiration
Cooled Gas Turbine Blade

SUBMITTED BY:
SHUBHAM GUPTA(180112026)
RANJEET KUMAR(180110050)
ASHISH KUMAR(180110021)
MOHIT SINGH(180110038)

UNDER THE SUPERVISION OF: DR. ONKAR SINGH

(Professor Mechanical Engineering Dept.)



SCHOOL OF ENGINEERING

DEPARTMENT OF MECHANICAL ENGINNERING

HARCOURT BUTLER TECHNICAL UNIVERSITY KANPUR

JUNE 2022

# A PROJECT REPORT ON DESIGN AND ANALYSIS OF CUBESAT STRUCTURE

Submitted in partial fulfillment for award of Bachelor of Technology

Degree

In Mechanical Engineering

By

Aman Lodhi (180110012) Vikas Verma (180110058) Vikram Chaudhary (180110059) Vishal Pal (180110060)

Under The Supervision of

Mr. R.K. AMBIKESH

(Associate Professor, Mechanical Engineering Department)



School of Engineering

Department of Mechanical Engineering

Harcourt Butler Technical University

Kanpur-208002

June, 2022

# A PROJECT REPORT ON DESIGN AND ANALYSIS OF CUBESAT STRUCTURE

Submitted in partial fulfillment for award of Bachelor of Technology

Degree

In Mechanical Engineering

By

Aman Lodhi (180110012) Vikas Verma (180110058) Vikram Chaudhary (180110059) Vishal Pal (180110060)

Under The Supervision of

Mr. R.K. AMBIKESH

(Associate Professor, Mechanical Engineering Department)



School of Engineering

Department of Mechanical Engineering

Harcourt Butler Technical University

Kanpur-208002

June, 2022

# CERTIFICATE

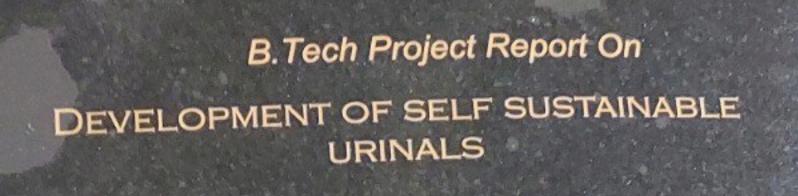
This is to certify that Avinash Krishna (180110024), Himanshu Verma (180110035), Mayank Chaudhary (180110037), Abhishek Singh (180110061) Students of Final Year B.Tech. Mechanical Engineering, Harcourt Butler Technical University Kanpur, have successfully completed their B.Tech. Project titled "Development of Self Sustainable Urinals" under my supervision and guidance. The project report embodies the studies and work carried by students themselves.

Dr. Jitendra Bhaskar

Professor

Dept of Mechanical Engg

HBTU Kanpur



## **Submitted By**

Avinash Krishna (180110024)
Himanshu Verma (180110035)
Mayank Chaudhary (180110037)
Abhishek Singh (180110061)

## Under the supervision of

Dr. Jitendra Bhaskar Professor



Department Of Mechanical Engineering
Harcourt Butler Technical University, Kanpur

## CERTIFICATE

This is to certify that Aman Lodhi (180110012), Vikas Verma (180110058), Vikram Chaudhary (180110059), Vishal Pal (180110060) students of Final B.Tech Mechanical Engineering, Harcourt Butler Technical University, Kanpur have successfully completed their B.Tech. Project titled "Design and Analysis of CubeSat Structure" under my supervision an guidance. The project report embodies the study and work carried out by students themselves and the content of the report do not form the basis for the award of any other degree to the candidates.

(R.K. Ambikesh)

Associate Professor

Department of Mechanical Engineering Harcourt Butler Technical University

Kanpur-208002

Date: 25/06/2022 Place: Kanpur

#### List of Project Session 2021-22

Sr. No.	Roll No.	Name of Student	Topic of Project	Project guide
1	180111019	Marriam Fatima	Current Scenario of Biodiesel and its Future Prospects	Dr. R.K.Trivedi
2	180111024	Shambhavi Awasthi	Current Scenario of Biodiesel and its Future Prospects	Dr. R.K.Trivedi
3	180111018	Gaurav Kumar	Extraction of silica from rice husk	Dr. R.K.Trivedi
4	180111021	Naseem Ansari	Extraction of silica from rice husk	Dr. R.K.Trivedi
5	180111010	Aryan Yadav	Waste Minimization & Energy Recovery from Spent Bleaching Earth	Dr. V.K.Tyagi
6	180111027	Utkarsh Gupta	Waste Minimization & Energy Recovery from Spent Bleaching Earth	Dr. V.K.Tyagi
7	180101010	Arpit Kumar	Extraction of edible oil from algae	Dr. V.K.Tyagi
8	180101017	Himanshu Kumar	Extraction of edible oil from algae	Dr. V.K.Tyagi
9	170111013	Ritesh Chaudhary	Production of palm oil based bio lubricants	Dr. P.K.S. Yadav
10	180111011	Ashutosh	Production of palm oil based bio lubricants	Dr. P.K.S. Yadav
11	180111006	Aman Jaiswal	Productions of transparent melt and pour soap	Dr. P.K.S. Yadav
12	180111014	Deepak Yadav	Productions of transparent melt and pour soap	Dr. P.K.S. Yadav
13	180111023	Ram Kishan Nishad	Synthesis of Oleo chemicals from castor Oil	Dr. P.K.S. Yadav
14	180111029	Yash Kumar Singh	Synthesis of Oleo chemicals from castor Oil	Dr. P.K.S. Yadav
15	180111022	Priyam Tandon	Extraction & Expression of Soyabaen seed	Mr. P.C.Gupta
16	180111001	Abhinav Arya	Extraction & Expression of Soyabaen seed	Mr. P.C.Gupta
17	180111015	Diksha Sachan	Production of biodiesel from non-conventional source	Mr. P.C.Gupta
18	180111008	Ankit Yadav	Production of biodiesel from non-conventional source	Mr. P.C.Gupta

Sr. No.	Roll No.	Name of Student	Topic of Project	Project guide
19	180111016	Gaurav Anand	Production of edible grade lecithin powder from oil	Mr. H.S.Sharma
20	180111028	Ved Prakash Kashyap	Production of edible grade lecithin powder from oil	Mr. H.S.Sharma
21	180111017	Gaurav Kumar	Production of Mentha Crystal	Mr. H.S.Sharma
22	180111030	Zaman Asraf	Production of Mentha Crystal	Mr. H.S.Sharma
23	180111012	Ashutosh Kr. Gupta	Production of pharmaceuticals grade glycerin	Mr. Sameer Singh
24	180111007	Amit Kumar	Production of pharmaceuticals grade glycerin	Mr. Sameer Singh
25	180111004	Ajay Kumar Gautam	Extraction of essential Oil from herb and spices	Mr. Sameer Singh
26	180111025	Siddarth Agarwal	Extraction of essential Oil from herb and spices	Mr. Sameer Singh
27	180111005	Akash Kumar Gupta	Production of syndet Bar	Mr. Gaurav Singh
28	180111026	Suraj Kumar	Production of syndet Bar	Mr. Gaurav Singh
29	180111009	Anurag Srivastava	Manufacturing of Poly Additives	Mr. Gaurav Singh
30	180111013	Ayan Ali Ansari	Manufacturing of Poly Additives	Mr. Gaurav Singh

#### PROJECT REPORT

ON

## Production of *Cordyceps militaris* on Various Media and Optimization of Drying Process

Submitted in

Partial fulfilment of the requirement for the degree of

Bachelor of Technology in Biochemical Engineering

2021-2022

#### Submitted By

Abdul Ahad	180101001
Aditi Tripathi	180101002
Akash Sahu	180101003
Alok Kumar	180101004

Under supervision of

Prof. Brajesh Singh

Associated professor & Head

Department of Biochemical Engineering

HBTU, Kanpur



### Certificate

This is to certify that Mr. Abdul Ahad (Roll number – 180101001), Ms. Aditi Tripathi (Roll number – 180101002), Mr. Akash Sahu (Roll number – 180101003) and Mr. Alok Kumar (Roll number – 180101004) students of Department of Biochemical Engineering, Harcourt Butler Technical University, Kanpur have completed their project report on topic "Production of *Cordyceps militaris* on Various Media and Optimization of Drying Process" under my supervision during the session 2021-22 and report which they have submitted is their genuine work.

During project, they demonstrated good behavior and skill with a self-motivated attitude to learn new things. Their performance exceeded expectation and was able to complete the training successfully on time.

We wish him a bright future and success all through his career.

Project supervisor & Head of Department

Prof. Brajesh Singh (Associated professor & Head)

Department of Biochemical Engineering HBTU, Kanpur

#### A PROJECT REPORT

ON

"Estimation and Quantification of Different Sugars in Sugarcane Bagasse and Coconut Coir"

Submitted

In partial fulfilment of the requirements for the Degree of

Bachelor of Technology

In

#### BIOCHEMICALENGINEERING



By

ASHISH KUMAR SINGH (Roll No.: 180101011)

ASHNA GUPTA (Roll No.: 180101012)

DINESH KUMAR BIND (Roll No.: 180101013)

HARSHIT GUPTA (Roll No.: 180101015)

Final B.Tech. Biochemical Engineering

Under the Guidance of

MR. PRAVIN KUMAR SACHAN

Department of Biochemical Engineering

HARCOUT BUTLER TECHNICAL UNIVERSITY, KANPUR

(2021-2022)



## हरकोर्ट बटलर प्राविधिक विश्वविद्यालय

नवायगंज, कानपुर - 208002, उ.प्र., भारत



#### HARCOURT BUTLER TECHNICAL UNIVERSITY

NAWABGANJ, KANPUR - 208002, U.P., INDIA (Formerly Harcourt Butler Technological Institute, Kanpur)

#### **CERTIFICATE**

(180101012), Mr. Dinesh Kumar Bind (180101013) and Harshit Gupta (Roll No.: 180101015) final year students of Harcourt Butler Technical University, Kanpur pursuing a degree of B.Tech. from the department of Biochemical Engineering had completed their Project in HBTU, Kanpur on the Title, "Estimation & Quantification of Different Sugars in Sugarcane Bagasse and Coconut Coir", under my supervision and guidance during the session 2021-22 and the report which they have submitted is their genuine work. This project was part of the student's course curriculum in the final year of the B.Tech program.

During the project tenure, they demonstrated good behaviour and skills with a self-motivated attitude to learn new things. Their performance exceeded expectations and was able to complete the project successfully on time.

We wish them all the best for his future endeavours.

Mr. Pravin Kumar Sachan

(Project Mentor)

Place: HBTU, Kanpur

Date: 15/07/2022

Mr. Brajesh Singh (Head of Department)

#### A PROJECT REPORT ON

Analysis and treatment of tannery waste water by using Combined filtration and coagulation treatment process

## SUBMITTED TO HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

In partial fulfilment of the requirements for the degree of

**BACHELOR OF TECHNOLOGY** 

IN CHEMICAL TECHNOLOGY

WITH SPECIALIZATION IN BIOCHEMICAL ENGINEERING

BY

Rajit Raj (Roll No. 180101023) Krishnakant Sharma (Roll No. 180101019) Mohd Tanzeel (Roll No. 180101021) Himanshu Gautam (Roll No. 180101016)

Under the supervision of Mr. MOHIT KUMAR YADAV



DEPARTMENT OF BIOCHEMICAL ENGINEERING
SCHOOL OF CHEMICAL TECHNOLOGY
HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR-208002 (U.P.)
INDIA 2021-22



# हरकोर्ट बटलर प्राविधिक विश्वविद्यालय

## Harcourt Butler Technical University

Nawabganj, Kanpur-208002, U.P. (INDIA)

(Formerly Harcourt Butler Technological Institute, Kanpur)

Phone: +91-0512-2534001-5, Fax: +91-0512-2533812, Website: http://www.hbtu.ac.in E-mail: vo@/hbtu.ac.in

#### DEPARTMENT OF BIOCHEMICAL ENGINEERING **CERTIFICATE**

This is to certify that Mr. RAJIT RAJ, Mr. MOHD TANZEEL, KRISHNAKANT SHARMA and Mr. HIMANSHU GAUTAM are student of B.Tech. Chemical Technology (with specialization in Biochemical Engineering) has worked under my supervision and guidance for the completion of her dissertation report entitled "Analysis and treatment of tannery waste water by using Combined filtration and coagulation treatment process" during the session 2021-2022.

They took keen interest in experimental work showing enthusiasm towards thorough and comprehensive study in preparation of this project report. I wish them a bright future and success all through their career.

(Mr. Mohit Kumar Yadav)

Assistant professor and Supervisor Department of Biochemical Engineering H.B.T.U. Kanpur

(Mr. Brajesh Singh)

Head of Department

Department of Biochemical Engineering

H.B.T.U. Kanpur

Date: 06/07/2022 Place: Kanpur

A

#### Project Report

On

"Water-Hyacinth- A Novel Biosorbent Used for Removal of Methylene Blue from Aqueous Solution: Kinetics and Equilibrium Studies"

#### Submitted

To

Harcourt Butler Technical University, Kanpur in partial fulfillment of the requirements

of

Bachelor of Technology in Biochemical Engineering

By

SUBHASH CHANDRA VERMA (170101026)

ASHUTOSH YADAV (170101005)

**RITIK KATIYAR (170101016)** 

**SUMIT KUMAR (170101027)** 

**MUSKAAN GUPTA (170101012)** 

Under the guidance of

Mr. Shashikant, Assistant Professor

Department of Biochemical Engineering



HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

2021-2022



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#### हरकोर्ट बटलर प्राविधिक विश्वविद्यालय

नवाबगंज, कानपुर - 208002, उ.प्र., भारत



#### HARCOURT BUTLER TECHNICAL UNIVERSITY

NAWABGANJ, KANPUR - 208002, U.P., INDIA

(Formerly Harcourt Butler Technological Institute, Kanpur)

Phone: +91-0512-2534001-5, 2533812, website: http://www.hbto.ac.in, Email: vc@hbtu.ac.in

Date: 1.6../07/2022

## **CERTIFICATE**

This is to certify that the thesis entitled, Water-Hyacinth- A Novel Biosorbent Used for Removal of Methylene Blue from Aqueous Solution: Kinetics and Equilibrium Studies" submitted by Subhash Chandra Verma (170101026), Ashutosh Yadav (170101005), Ritik Katiyar (170101016), Sumit Kumar (170101027) And Muskaan Gupta (170101012), in partial fulfillments for his requirements for the award of Bachelor of Technology Degree in Biochemical Engineering at Harcourt Butler Technical University. Kanpur is prepared by him under my supervision and guidance.

Name & Signature of Supervisor

(Mr. Shashikant)

Name & Signature of HOD

(Prof. Brajesh Singh)

#### PROJECT REPORT

ON

#### BIOHYDROGEN PRODUCTION BY ENZYMATIC HYDROLYSIS OF

#### FOOD WASTE IN BATCH SYSTEM

Submitted
In partial fulfilment of the requirements
for the Degree of

Bachelor of Technology

In

#### **BIO-CHEMICAL ENGINEERING**



Ву

ANIL KUMAR SINGH (Roll No.: 180101006)

ANKISH VERMA (Roll No.: 180101008)

ANURAG MISHRA (Roll No.: 180101009)

ANIKET (Roll No.: 180101005)

Final B.Tech. Bio-chemical Engineering

Under the Guidance of DR, LALIT KUMAR SINGH

**Assistant Professor** 

Department of Bio-Chemical Engineering

DEPARTMENT OF BIO-CHEMICAL ENGINEERING
HARCOUT BUTLER TECHNICAL UNIVERSITY, KANPUR

## CANDIDATE DECLARATION

This is to declare that the report which has been presented here entitled "BIOHYDROGEN PRODUCTION BY ENZYMATIC HYDROLYSIS OF FOOD WASTE IN BATCH SYSTEM" in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology and submitted in the Department of Bio-Chemical Engineering of H.B.T.U., Kanpur is an authentic record of our own work carried out under the guidance of Dr. Lalit Kumar Singh, Assistant Professor, the Department of Bio-Chemical Engineering of H.B.T.U., Kanpur.

The matter embodied in this report has not been submitted by us for the award of any other degree or diploma.

Date:

ANIL KUMAR SINGH (ROTI No.: 180101006)

Ankish verma (Roll No.: 180101008)

Anurag Mishra

ANURAG MISHRA (Roll No.: 180101009)

ANIKET (Roll No.: 180\01005)

Final B. Tech Bio-Chemical Engineering

The above statement made by the candidates is correct to the best of my knowledge.

DR. LALIT KUMAR SINGH

Assistant Professor

Department of Bio-Chemical Engineering

H.B.T.U. Kanpur

#### **Harcourt Butler Technical University Computer Science & Engineering Department**

B.Tech CSE (2021-22)- Final Year Project						
Sr. No.				Project guide		
1	180104008	Aditya kumar	Real time Human activity recogniton using deep learning	Dr. Prabhat Verma		
2	180104009	Ajaj Ahamed	Real Time Human activity recogniton using deep learning	Dr. Prabhat Verma		
3	180104017	Arvind Kumar	Real Time Human activity recogniton using deep learning	Dr. Prabhat Verma		
4	180104040	Ram Bharosh Kumar	Real Time Human activity recogniton using deep learning	Dr. Prabhat Verma		
5	180104034	Krishnam Dhawan	Tree Born: "HEAR THE ECO", Air quality monitoring	Dr. Anita Yadav		
6	180104051	Shivam Nehra	Tree Born: "HEAR THE ECO", Air quality monitoring	Dr. Anita ⁄adav		
7	180104037	Prateek Goel	Tree Born: "HEAR THE ECO", Air quality monitoring	Dr. Anita Yadav		
8	180104062	Aman Singh	Tree Born: "HEAR THE ECO", Air quality monitoring	Dr. Anita Yadav		
9	180104057	Utkarsh Tiwari	Automated driving aid using computer vision	Dr. Raghuraj Singh		
10	180104041	Rishpreet Singh	Automated driving aid using computer vision	Dr. Raghuraj Singh Dr. Raghuraj		
11	180104015	Ansh Shankar	Automated driving aid using computer vision	Singh  Dr. Raghuraj		
12	180104016	Arpit Malik	Automated driving aid using computer vision	Singh  Dr. Vandana		
13	180104032	Kamal kant Singh	Heart Disease using ML	Dixit  Dr. Vandana		
14	180104011	Akshay rathi	Heart Disease using ML	Dixit  Dr. Vandana		
15	180104029	Honey singh	Heart Disease using ML	Dixit Dr. Vandana		
16	180104047	Shashank gautam	Heart Disease using ML  Automatic license number plate recognition	Dixit Dr. Prabaht		
17	180104001	Aakriti Kaithwas	ystem Automatic license number plate recognition	Verma Dr. Prabaht		
18	180104003	Abhay	system  Automatic license number plate recognition	Verma Dr. Prabaht		
19	180104005	Abhishek Kamal	system  Automatic license number plate recognition	Verma Dr. Prabaht		
20	170104063	Vishal Singh	system	Verma Dr. Anita		
21	180104059	Vivek verma	Image caption generator	/adav Dr. Anita		
22	1801004060	Yaman Varshney	Image caption generator	<b>/adav</b>		

				Dr. Anita
23	180104030	Ishank Katiyar	Image caption generator	<b>r</b> adav
			l	Dr. Anita
24	180104044	Sameer garg	Image caption generator	/adav
25	100101050	CI: : D I	<b>.</b>	Dr. Raghuraj
25	180104052	Shivangi Dubey	Driver drowsiness detection system	Singh
26	400404064	NA -L -L-1 - IZ - L	Bit and a situate data the control	Dr. Raghuraj
26	180104064	Mokshin Koul	Driver drowsiness detection system	Singh
27	190104024	Carima Singh	Driver dreweiness detection system	Dr. Raghuraj
21	180104024	Garima Singh	Driver drowsiness detection system	Singh
28	180104058	Vishal Anand	Driver drowsiness detection system	Dr. Raghuraj
20	160104036	VISIIdi Alidilu	Driver drowsiness detection system	ingh Dr. Vandana
20	100104013	Alankrit Varma	Algorithimis trading bot	
29	180104012	Alankrit Verma	Algorithimic trading bot	Dixit
20	100104030	Llovobito Avus	Algorithism is two diagraps	Dr. Vandana
30	180104028	Harshita Arun	Algorithimic trading bot	Dr. Vandana
24	100104036	Harch Crivactoria	Algorithimic trading bot	Dr. Vandana
31	180104026	Harsh Srivastava	Algorithimic trading bot	Dixit
32	180104039	Rajneesh Dubey	Algorithimic trading bot	Dr. Vandana Dixit
32	180104039	Rajneesh Dubey		
			Home loan approval prediction using big data	Dr. Vandana
33	180104020	Deeksha Lala	and ML	Dixit
			Home loan approval prediction using big data	Dr. Vandana
34	180104038	Priyanshi Agarwal	and ML	Dixit
			Home loan approval prediction using big data	Dr. Vandana
35	180104043	Sakshi Agarwal	and ML	Dixit
			Home loan approval prediction using big data	Dr. Vandana
36	180104054	Stuti Saini		Dixit
				-
			Sign language recognition system for deaf and	Dr. Narandra
37	180104046	Camuank crivactava	dumb using a symbol chart(using ML, Computer vision, DIP)	Dr. Narendra
37	180104040	Samyank srivastava	•	Kohli
			Sign language recognition system for deaf and	
			dumb using a symbol chart(using ML, Computer	Dr. Narendra
38	180104004	Abhinav mehrotra	vision, DIP)	Kohli
			Sign language recognition system for deaf and	
			dumb using a symbol chart(using ML, Computer	Dr. Narendra
39	180104002	aakriti Sehrawat	vision, DIP)	Kohli
			Sign language recognition system for deaf and	
			dumb using a symbol chart(using ML, Computer	Dr. Narendra
40	180110013	Amit Singh	vision, DIP)	Kohli
			· ·	Dr. Vandana
41	180110028	Doonika iunoia	Music recommendation system based on facial	Dixit
41	100110070	Deepika juneja	<u> </u>	
	40040404	Charle !	Music recommendation system based on facial	Dr. Vandana
42	180104048	Shashwat agarwal	emotion recognition	Dixit
			Music recommendation system based on facial	Dr. Vandana
43	180105018	Pradyuman Maurya	emotion recognition	Dixit

			Music recommendation system based on facial	Dr. Vandana
44	180104022	Deepak Pratap Seth	emotion recognition	Dixit
				Dr. Narendra
45	180104018	Ashutosh trivedi User chat analysis for multiple cases		Kohli
				Dr. Narendra
46	180104010	Akshat Sachan	User chat analysis for multiple cases	Kohli
				Dr. Narendra
47	180104061	Ajit jain	User chat analysis for multiple cases	Kohli
				Dr. Narendra
48	180104027	Harshit Jain	User chat analysis for multiple cases	Kohli
				Dr. Narendra
49	180104050	Shivam kumar	crime rate prediction using k -means	Kohli
		Suryansh		Dr. Narendra
50	180104055	raghuvanshi	crime rate prediction using k -means	Kohli
				Dr. Narendra
51	180104036	Manish kumar	crime rate prediction using k -means	Kohli
				Dr. Narendra
52	180104025	harsh rathaur	crime rate prediction using k -means	Kohli
				Dr. Raghuraj
53	180104021	Deepak kumar	finding missing person using AI	Singh
				Dr. Raghuraj
54	180104042	Rohit pratap singh	finding missing person using AI	Singh
	100101010		6. 1	Dr. Raghuraj
55	180104019	Chandrakant singh	finding missing person using AI	Singh
5.0	400402006	Alaberta de la la contra de la contra dela contra de la contra del contra de la contra del contra de la contra del contra de la contra de la contra de la contra de la contra del contra de la contra del contra de la contra de la contra de la contra de l	Gulling advisors and Al	Dr. Raghuraj
56	180103006	Abhishek chaudhary	finding missing person using AI	Singh
	100104000	A la la cia de la cia de	Ovelity shooting value income are consider	Dr. Prabhat
57	180104006	Abhishek singh	Quality checking using image processing	Verma
58	100104007	aditua divit	Quality shocking using image processing	Dr. Prabhat
36	180104007	aditya dixit	Quality checking using image processing	Verma Dr. Prabhat
59	180104045	Samir yadav	Quality checking using image processing	
39	160104043	Deepanshu	Quality checking using image processing	Verma Dr. Prabhat
60	180104023	chaudhary	Quality checking using image processing	Verma
00	100104023	onadanary	County encoking using intuge processing	Dr. Anita
61	180104063	Rohit pratap singh	Cartoonify image with ML	Yadav
01	100104003	Home pracap singil	Controlling mage with ML	Dr. Anita
62	180104014	Ankit singh	Cartoonify image with ML	/adav
"				Dr. Anita
63	180104013	Aman verma	Cartoonify image with ML	/adav
		-	, 0	Dr. Anita
64	180104049	shiv kumar	Cartoonify image with ML	<b>r</b> adav

#### **Harcourt Butler Technical University**

#### **Computer Science & Engineering Department**

#### **B.Tech Information Technology (2021-22)- Final Year Project**

SI.	Roll No.	Name	Project Name	Supervisor	
1	180108020	Pragya Katiyar			
2	180108032	Rajat Aggarwal	Automated Rating of	5 7 1 5: :: // 1:1	
3	180108029	Vaibhav Tripathi	Online Review	Dr. Vandana Dixit Kaushik	
4	180108017	KAPIL KUMAR DWIVEDI			
5	180108026	Saumya Rastogi			
6	180108018	Milind Kaushal	Cattle Care Application	Dr. Anita Yadav	
7	180108015	Divyansh Tripathi			
8	180108007	Ankesh ojha			
9	180108008	Ashutosh Bhalothia	Web Scraper	Drof Daghurai Singh	
10	180108005	Amrendra singh	Web-Scraper	Prof. Raghuraj Singh	
11	180108024	Sachin Kumar			
12	180108002	Alankrita Mishra	Emption Decomition and		
13	180108030	Yukti Gangwar	Emotion Recognition and Depression Detection	Dr. Prabhat Verma	
14	180108027	Shipra Roy	Depression Detection		
15	180108006	Ankesh Kumar			
16	180108004	Amit kumar patel	Stock Market Prediction	Dr. Prabhat Verma	
17	180108003	Alok Dwivedi	Stock Market Prediction		
18	180108028	Taquiuddin			
19	180108013	Balram Verma			
20	180108001	Akshit Singh	Indian sign language	Prof. Narendra Kohli	
21	180108031	Priyakant Panwar	Detection using Machine Learning	Prof. Nateriala Koriii	
22	170108002	ABHAY PATEL	250111116		
23	180108023	Ritik kumar Nayak	Analysis of Coronary Artery		
24	180108022	Rishabh R Chaudhary	Disease Using Various	Prof. Raghuraj Singh	
25	180108019	Mohak Nigam	Machine Learning	Prof. Ragnuraj Siligii	
26	180108021	Rajwardhan Singh	Techniques		
27	180108014	Divya Kumar Jaiswal			
28	180108016	Hemant Kumar Patel	Critique	Duet Nevendue Kehl:	
29	180108009	Atul Bharti	Critique	Prof. Narendra Kohli	
30	180108025	Sanskrati Gupta			
31	180108012	AYUSHI JAISWAL	Damanalii Burdinii		
32	180108010	Avantika Singh Parihar	Personality Prediction System Using CV Analysis	Dr. Vandana Dixit Kaushik	
33	180108011	Avinash Dixit	System Using CV Analysis		

#### **Harcourt Butler Technical University**

#### **Computer Science & Engineering Department**

#### MCA (2021-22 ) (Three Year Programme)- Final Year Industrial Project

SR.NO	ROLL NO	STUDENT NAME	<b>Project Title</b>	Company Name	From	То
1	190231001	ABHAY PRATAP SINGH	Internship Task	Cognizant	22/4/2022	22/10/202
2	190231002	ABHISHEK SINGH	Front End Development	Smart Programming Pvt Ltd.	15/2/2022	14/7/2022
3	190231003	ABHISHEK FRIPATHI	Buzzz A Social Media Web Application	To The New	02-08-2022	08-08- 2022
4	190231004	AKASH AGARWAL	BooKz Kart	Smart Programming Pvt Ltd.	15/2/2022	14/7/2022
5	190231005	AKASH KESHARI	Job Portal	Smart Programming Pvt Ltd.	14/2/2022	14/6/2022
6	190231006	AKASH KUMAR	Online Code Editior	Smart Programming	02-05-2022	15/7/2022
7	190231007	AKASH TYAGI	Internship Task	MediaTek India Fechnology Pvt. Ltd.Noida	12-05-2021	31/05/202
8	190231008	AKSHAT JAIN	IAM+(Middle East Bahrain)	Unthinkable Solutions LLP	10-04-2021	06-03- 2022
9	190231009	AMISHA KUMARI	Hospital Management System	SkyBase Technolgy	02-01-2022	05-10- 2022
10	190231010	ANKITA PANDEY	Buzzz A Social Media Web Application	To The New	02-08-2022	08-08- 2022
11	190231012	ANSHIKA GOVIL	Internship Task	Samsung SDS	02-01-2022	30/6/2022
12	190231013	ARPIT AMRESH RAGHUBANSI	SAP-ABAP Development	IBM	01-12-2022	06-10- 2022
13	190231014	ARPITA VERMA	Shoping Cart	Samsung SDS	02-01-2022	30/6/2022
14	190231015	ASHUTOSH SINGH	Internship Task	Samsung SDS	02-01-2022	30/6/2022
15	190231016	ASHUTOSH FRIPATHI	Municipal Coroporation	Webhub Fechnology	02-01-2022	30/6/2022

			Complained Handling Process			
16	190231017	ASHVANI PANDEY	Job Portal	Smart Programming Pvt Ltd.	14//2/2022	14/7/2022
17	190231018	ASHVANI SINGH	PB Direct ( Profession Beauty Direct)	MobCoder	02-01-2022	31/7/2022
18	190231019	AYUSH AGRAWAL	Internship Task	Samsung SDS	02-01-2022	30/6/2022
19	190231020	AYUSH GAUTAM	Online Chating Application	WUD Theory Pvt Ltd	20/1/2022	25/4/2022
20	190231021	AYUSH PANDEY	Social Media Web Application	Tanzanite InfoTech	02-05-2022	20/6/2022
21	190231022	AYUSHI SINGH	Online Examination Systsem	Samsung SDS	02-01-2022	30/6/2022
22	190231023	BHUPENDRA UMRAO	Online Chating System	Cosmo Info Solutions	02-01-2022	15/5/2022
23	190231024	DEEPAK MISHRA	Internship Task	HP Intership India	02-05-2022	07-05- 2022
24	190231025	DEVANSHA	Self Driving Car	E-Gains	02-05-2022	31/5/2022
25	190231026	DIVYAPRAKASH YADAV	Internship Task	Samsung SDS	02-01-2022	30/6/2022
26	190231027	GITANJALI SAINI	Health Cloud CRM	Unthinkable Solutions LLP	10-04-2021	06-04- 2022
27	190231028	HARSHIT OMER	Pick Food	Sky Base Institute	02-01-2022	05-10- 2022
28	190231029	HIMANSHU AWASTHI	Social Media Application	To The NEW	02-01-2022	30/6/2022
29	190231030	ISHITA KUMARI	Twitter Sentiment Analysis	Cognizant	22/1/2022	31/5/2022
30	190231031	KAJAL VISHWAKARMA	Online Shoping	Samsung SDS	02-01-2022	30/6/2022
31	190231032	KAJUL SHARMA	Smart Planning and Execution FPP	Yamaha Motors Solution Ltd India	27/1/2022	27/5/2022
32	190231033	KIRTI SINGH	Disease Predictor Using ML	SkyBase Technolgy	02-01-2022	05-10- 2022
33	190231034	KM AARZOO RATHI	E-Commerce App (E-Search)	Tycho Fechnologies Pvt Ltd.	1/2/20222	30/4/2022

34	190231035 KM SMRITI GUPTA		Scrum Master	Nagarro	03-09-2022	30/8/2022	
35	190231036	KRISHNANAND SINGH	Internship Task	Samsung SDS	02-01-2022	30/6/2022	
36	190231037	KUNVAR ABHISHEK SINGH	Greenglobe Natural Foods Customer Relationship Management	Webhub Fechnology	02-01-2022	30/6/2022	
37	190231038	MANDAKINI SINGH	To 24/7 Shoping Online Shoping)	Sky Base Computer Institute	02-01-2022	05-10- 2022	
38	190231039	MANJARY GUPTA	Food Ordering System Using PHP	Tikona Infinet Pvt Ltd.	02-01-2022	05-01- 2022	
39	190231040	MANJEET SINGH	Titanic3	Cognizant	18/5/2022	17/7/2022	
40	190231041	MARISHA AGNIHOTRI	E-Commerce Website	Cognizant Fechnology Solution	18/1/2022	16/6/2022	
41	190231043	MOHD UVAID	Apna Store	Webhub Fechnology	02-01-2022	30/6/2022	
42	190231044	MOHIT YADAV	Kismat Collection A Spin Wheel)	Dark Beans Software Pvt Ltd.	31/3/2022	30/6/2022	
43	190231045	NAMAN ARORA	Internship Task	Sapphire Application Integrators Pvt. Ltd.	01-01-2022	31/5/2022	
44	190231046	NANDITA SAXENA	Stanza Living	Daffodil Software Unthinkable Solutions LLP	10-04-2021	06-04- 2022	
45	190231047	NIKITA UPADHYAY	Home Loan	Samsung SDS	02-01-2022	30/6/2022	
46	190231048	NIRAJ SINGH	Internship Task	Samsung SDS	02-01-2022	30/6/2022	
47	190231049	PRAMOD KUMAR CHAUHAN	Online Parking System	Midbrains Fechnology Pvt. Ltd	01-03-2022	07-04- 2022	
48	190231050	PRINCEE GUPTA	E-Commerce Website	Webhub Fechnology	02-01-2022	30/6/2022	
49	190231051	RAJAT DIXIT	O-Zon ( Orphanage and Old age Zone	Sky Base Computer Institute	02-01-2022	05-10- 2022	
50	190231052	RAJAT PAL	ETL Developer	CELEBAL Fechnologies	01-01-2022	30/6/2022	
51	190231053	RISHABH KUMAR MAURYA	Car Rental	Cosmo Info Solutions	02-05-2022	06-05- 2022	

52	190231054	RITESH VERMA	Online Shoping	Samsung SDS	02-01-2022	30/6/2022
53	190231056	ROHIT SHARMA	Hexaview Korporate (OMS)	Hexaview Fechnologies	01-05-2022	07-04- 2022
54	190231057	SADAKAT ALI	Internship Task	Brabura Solutions Pvt. Ltd.	14/2/2022	07-03- 2022
55	190231058	SAGARIKA IAISWAL	Sign Language to Fext Conversion for Deaf and Dumb	SkyBase Technolgy	02-01-2022	05-10- 2022
56	190231061	SAUMITRA BAJPAI	Market on Wheels	Cognizant	02-12-2022	08-08- 2022
57	190231062	SAURABH KUMAR TRIPATHI	Internship Task	Samsung SDS	02-01-2022	30/6/2022
58	190231063	SHALINI VERMA	Online Shoping	Samsung SDS	02-01-2022	30/6/2022
59	190231064	SHAMALI GUPTA	Futuristic Fechnology	STUCRA Pvt Ltd.	01-01-2022	30/05/202
60	190231065	SHIPRA	CCTV Viewer App	MobCoder	03-10-2022	06-10- 2022
61	190231066	SHIVAM BANSAL	Internship Task	Samsung SDS	02-01-2022	30/6/2022
62	190231067	SHRUTI AGARWAL	Congnizant Covid Portal	Cognizant Fechnology Solution	22/1/2022	16/6/2022
63	190231068	SMRITI MISHRA	Internship Task	Samsung SDS	02-01-2022	30/6/2022
64	190231069	STUTI SHUKLA	Internship Task	Samsung SDS	02-01-2022	30/6/2022
65	190231070	SWAPNIL YADAV	Hand Gesture Volume Controller	SkyBase Technolgy	02-01-2022	05-10- 2022
66	190231071	SYED AHMAD AZIZ	Website Design & Development	ATOS Syntel Pvt Ltd.	01-01-2022	05-03- 2022
67	190231072	TUSHAR AGARWAL	Samsung SDS Chat Application	Samsung SDS	02-01-2022	30/6/2022
68	190231073	TUSHAR GUPTA	Internship Task	Samsung SDS	02-01-2022	30/6/2022
69	190231074	VEDIKA TIWARI	O-Zon ( Orphanage and Old age Zone	Sky Base Computer Institute	02-01-2022	05-10- 2022
70	190231076	VIRAT UPADHYAY	Invoice Management	RA Institute	15/2/2022	15/5/2022

71	190231077	VIVEK SHARMA	Internship Task	Hexaview	02-01-2022	31/7/2022	1
			_	Technologies			ı

#### **Harcourt Butler Technical University Computer Science & Engineering Department** MCA (2021-22) (Two Year Programme)-Final Year Project Sr. No. Roll NO. **Group Member's Name Project Topic Project Supervisior** 200231001 Aakash Gaur Sentiment 2 200231007 Ajay Kumar Verma Analysis of Prof. Narendra Kohli Product based 3 200231016 **Anurag Singh** Reviews 4 200231021 Ayushi Verma Comparative 5 200231011 Akshika Mittal Study Amazon 6 200231035 Mohd Shadab **Apparel** Prof. Raghuraj Singh 7 200231064 Shivangi Recommendation 8 200231075 Tuba Khan System 9 200231045 Pragati Tiwari KARKINOS 10 200231006 Aditya Soni Restaurants Dr. Prabhat Verma Management 200231003 Abhishek Dwivedi 11 System Using ML 12 200231078 Vartika Jaiswal **Brain Tumor** 13 200231074 Sushant Baghel **Detection Using** Dr. V.D. Kaushik 14 Deep Learning 200231037 Navjyot Kumar Models 15 200231073 Suryansh Singh 16 200231032 Kushagra Verma **Emojifier Using** 17 200231044 Prachi Gupta Dr. V.D. Kaushik CNN 18 200231066 Shubham Logani 19 200231019 Avani Singh 20 200231024 Dheeraj Tiwari **Predicting Sales** Dr. Prabhat Verma for Supermarkets 21 200231039 Nivedita Jain 22 200231047 Pratibha Vishwakarma 23 200231025 **Gaurav Singh** Raj Kumar 24 200231052 **Digital Learning** Dr. Prabhat Verma Via Gamification 25 200231054 Riturendra 26 200231059 Saumya Sachan

27	200231013	Ankit Yadav		
28	200231028	Himanshu Kumar Jaiswal	Sensor Data	D A '' V I
29	200231041	Pawan Kumar Verma	Fusion	Dr. Anita Yadav
30	200231061	Shikhar Kumar		
31	200231031	Kamal Nayan Rai		
32	200231033	Lokesh Katiyar	Malicious Node Detection in	Dr. Anita Yadav
33	200231046	Pranshu Katiyar	— Wireless Network	DI. Allita Tauav
34	200231053	Rishabh Verma	TTII CICSS TTCCTTOTIC	
35	200231067	Shubhanshu Maurya	Decentralized	
36	200231071	Sumit Gangwar	Cloud Storage	Dr. Anita Yadav
37	200231057	Sanjay Chaudhary	with BlockChain	Dr. Amta radav
38	200231050	Rahul kumar Gupta		
39	200231017	Arpit chaturvedi	Customer	
40	200231018	Arpita Kashyap	Partnership Portal	Prof. Narendra Kohli
41	200231030	Kajal Kumari	Using Cloud	1 Ton Harenara Rom
42	200231056	Sagar Gupta	Technology	
43	200231014	Anshika Pandey	Personalized Film	
44	200231068	Sidra Zaidi	and Television	Prof. Narendra Kohli
45	200231072	Supriya Shahi	Recommendation	
46	200231076	Utkarsh Chaudhary	System	
47	200231023	Chirag Papneja		
48	200231042	Prabhat Kumar Kohliyan	Stock Market	Dr. Prabhat Verma
49	200231012	Aman Kant Savita	Prediction System	
50	200231051	Rahul Mohan		
51	200231002	Abhishek Dubey		
52	200231004	Adarsh Gupta	Transcatify - An E-	Prof. Raghuraj Singh
53	200231005	Adit Agarwal	wallet web app	
54	200231009	Akash Arun Gupta		
55	200231049	Rahul Gupta		
55 56	200231049	Satyam Jaiswal	Face Mask	
57	200231038	Paras Gupta	Detection &	Dr. Anita Yadav
58	200231040	<u> </u>	Recognition	
20	200231009	Smriti Tripathi		
59	200231027	Harshit Shukla		
60	200231027	Neha Singh	Emotion Detection	Prof. Raghuraj Singh
61	200231038	Prabhat Kumar tiwari	Through Speech	i ioi. Nagiiaiaj Jiligil
01	200231043	i iasmat Numai tiwan		
			Study the impact	Dr. V.D. Kaushik

63	200231062	Shivam Singh	of EVs on Indian	
64	200231063	Shivam Tiwari	Economy	
65	200231034	Manali Sharma		
66	200231048	Priya Katiyar	Distance	Dr. Anita Yadav
67	200231008	Akanksha Singh	Calculator App	Dr. Affila Yauav
68	200231029	Isha Agrawal		
69	200231065	Shubham Chaurasia		
70	200231036	Monisha Chaurasia	Health Workforce	Prof. Narendra Kohli
71	200231015	Antra Tiwari	Data visualization	
72	200231020	Aviral Dixit		
73	200231010	Akshay Dhingra		
74	200231026	Harsh Bhatnagar	Nifty Fifty	Dr. V.D. Kaushik
75	200231055	Sachin Pratap Singh	Predictor	DI. V.D. Kausilik
76	200231070	Somesh Tiwari		

### User Chat Analysis using Machine Learning

A Project Report Submitted
In Partial Fulfilment of the Requirements
For the Award of the Degree of
Bachelors of Technology

In

Computer Science and Engineering

By

Harshit Jain

(Enrollment No: HBTU180104027)

Akshat Sachan

(Enrollment No: HBTU180104010)

Ashutosh Trivedi

(Enrollment No: HBTU180104018)

Ajit Jain

(Enrollment No: HBTU180104061)

Under the supervision of

Dr. Narendra Kohli

Professor

Department of Computer Science and Engineering,



To the School of Engineering Harcourt Butler Technical University, Kanpur (May, 2022)

## SIGN LANGUAGE RECOGNITION SYSTEM

A Project Report Submitted in Partial Fulfillment of the requirements for the Award of the Degree of Bachelors of Technology in Computer Science and Engineering

Under the Supervision of-

Dr. Narendra Kohli
Head of Department
Department of Computer Science and Engineering,
Harcourt Butler Technical University, Kanpur

By-Aakriti Sahrawat (180104002) Abhinav Mehrotra (180104004) Samyak Srivastava (180104046) Amit Singh (180110013)



To The
School of Engineering
Harcourt Butler Technical University, Kanpur
(Formerly Harcourt Butler Technological Institute, Kanpur)
(June, 2022)

### DRIVER DROWSINESS DETECTION SYSTEM

A Project Report Submitted In Partial Fulfilment of the Requirements For the Award of the Degree of

### **Bachelors of Technology**

In

Computer Science and Engineering By

Garima Singh Bhadauria

(Enrollment No: HBTU180104024)

Shivangi Dubey

(Enrollment No: HBTU180104052)

Vishal Anand

(Enrollment No: IIBTU180104058)

Mokshin Koul

(Enrollment No: HBTU180104064)

Under the Supervision of Dr. Raghuraj Singh Professor

Department of Computer Science and Engineering, Harcourt Butler Technical University, Kanpur



To the School of Engineering Harcourt Butler Technical University, Kanpur (Formerly Harcourt Butler Technological Institute, Kanpur) (June, 2022)

## AUTOMATED DRIVER-ASSISTANCE SYSTEM

A Project Report Submitted In Partial Fulfillment of the Requirements For the Award of the Degree of

### **Bachelors of Technology**

In

Computer Science and Engineering

By

Ansh Shanker

(Enrollment No: HBTU180104015)

Arpit Malik

(Enrollment No: HBTU180104016)

Rishpreet Singh

(Enrollment No: HBTU180104041)

Utkarsh Tiwari

(Enrollment No: HBTU180104057)

Under the Supervision of Dr. Raghuraj Singh Professor

Department of Computer Science and Engineering, Harcourt Butler Technical University, Kanpur



To the
School of Engineering
Harcourt Butler Technical University, Kanpur
(Formerly Harcourt Butler Technological Institute, Kanpur)
(June, 2022)

### Tree Born- Hear The Echo Application

A Project Report Submitted In Partial Fulfilment of the Requirements For the Award of the Degree of

## **Bachelor of Technology**

COMPUTER SCIENCE AND **ENGINEERING** 

By

Krishnam Dhawan

(Enrollment No: HBTU180104034)

Prateek Goel

(Enrollment No: HBTU180104037)

Shivam Nehra

(Enrollment No: HBTU180104051)

Aman Singh

(Enrollment No: HBTU180104062)

Under the supervision of

Dr. Anita Yadav

Associate Professor

Department of Computer Science and Engineering, Harcourt Butler Technical University, Kanpur



To the

School of Engineering Harcourt Butler Technical University, Kanpur

(Erstwhile Harcourt Butler Technological Institute, Kanpur)

### "Image Caption Generator"

A Project Report Submitted

In Partial Fulfillment of the Requirements

For the Degree of

### **Bachelor of Technology**

In

Computer Science and Engineering

by

Vivek Verma (HBTU180104059)

Yaman Varshney (HBTU18010460)

Ishank Katiyar (HBTU180104030)

Sameer Garg (HBTU180104044)

Under the Supervision of

Dr. Anita Yadav

Associate Professor

Harcourt Butler Technical University,

Kanpur



To

School of Engineering

Harcourt Butler Technical University, Kanpur (Formerly Harcourt Butler Technological Institute, Kanpur)

(June 2022)

## RICE GRAIN QUALITY ANALYSIS USING IMAGE PROCESSING

A Project Report Submitted in Partial Fulfillment of the requirements for the Award of the Degree of Bachelors of Technology in Computer Science and Engineering

Under the Supervision of-

### Dr. PRABHAT VERMA

Assistant Professor

Department of Computer Science and Engineering,
Harcourt Butler Technical University, Kanpur

By-Aditya Dixit(180104007) Abhishek Singh(180104006) Deepanshu(180104023) Samir Yadav (180104045)



To The
School of Engineering
Harcourt Butler Technical University, Kanpur
(Formerly Harcourt Butler Technological Institute, Kanpur)
(June, 2022)

٨

Project Report

on

# AUTOMATIC NUMBER PLATE RECOGNITION SYSTEM

Submitted in partial fulfilment of the requirement

For the award of Degree of

## Bachelor of Technology

Computer Science and Engineering

Under the supervision of Dr. Prabhat Verma (Assisstant Proffessor) HBTU Kanpur

#### By:

Aakriti Kaithwas(180104001) Vishal Singh(170104063) Abhay(180104003) Abhishek Kamal(180104005)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING Harcourt Butler Technical University, Kanpur, 208002 (2021-2022)

# MUSIC RECOMMENDATION SYSTEM BASED ON FACIAL EMOTION RECOGNITION

A Project Report Submitted

In Partial Fulfillment of the Requirements For the Award of the Degree of

Bachelors of Technology

In

Computer Science and Engineering

By

Deepika Juneja

(Enrollment No: HBTU180110028)

Shashwat Agarwal

(Enrollment No: HBTU180104048)

Pradyumn Maurya

(Enrollment No: HBTU180105018)

Deepak Pratap Seth

(Enrollment No: HBTU180104022)

### UNDER THE SUPERVISION OF

Dr. Vandana Dixit Kaushik

Assistant Professor, Department of Computer Science and Engineering Harcourt Butler Technical University, Kanpur



To the

School of Engineering

Harcourt Butler Technical University, Kanpur (Formerly Harcourt Butler Technological Institute, Kanpur) (May, 2022)

### Project Report

On

## LOAN APPROVAL USING MACHINE LEARNING AND DATA MINING.

Submitted in partial fulfillment of the requirement for

Degree of Bachelor of Technology in

Computer Science and Engineering

Under the supervision of

Dr. Vandana Dixit Kaushik

(Assistant Professor & Supervisor)

**HBTU Kanpur** 

By:

Deeksha Lala (180104020)

Priyanshi Agrawal (180104038)

Sakshi Agarwal (180104043)

Stuti Saini (180104054)



# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING HBTU KANPUR - 208002 2021-2022

### CRITIQUE

A Project Report Submitted In Partial Fulfillment of the Requirements For the Award of the Degree of

## Bachelors of Technology

ln

Information Technology

By

Atul Bharti

(Enrollment No: HBTU180108009)

Divya Kumar Jaiswal

(Enrollment No: HBTU180108014)

**Hemant Kumar Patel** 

(Enrollment No: HBTU180108016)

Sanskrati Gupta

(Enrollment No: HBTU180108025)

Under the supervision of Dr. Narendra Kohli Professor & Hlad

-Head of Department

Computer Science and Engineering Department, Harcourt Butler Technical University, Kanpur



School of Engineering

Harcourt Butler Technical University, Kanpur (Formerly Harcourt Butler Technological Institute, Kanpur) (May, 2022)

1

## Indian sign language Detection using Machine Learning

A Project Report Submitted
In Partial Fulfillment of the Requirements
For the Award of the Degree of

## Bachelors of Technology

In

Information Technology

By

Priyakant Panwar

(Enrollment No: HBTU180108031)

Balram Verma

(Enrollment No: HBTU180108013)

Akshit Singh

(Enrollment No: HBTU180108001)

**Abhay Patel** 

(Enrollment No: HBTU170108002)

Under the supervision of Dr. Narendra Kohli

Professor, 2 Hand

### Head Of The Department

Department of Computer Science and Engineering, Harcourt Butler Technical University, Kanpur



To the
School of Engineering
Harcourt Butler Technical University, Kanpur
(Formerly Harcourt Butler Technological Institute, Kanpur)
(May, 2022)

### ANALYSIS OF CORONARY ARTERY DISEASE USING VARIOUSMACHINE LEARNING TECHNIQUES

A Project Report Submitted In Partial Fulfillment of the Requirements For the Award of the Degree of

### Bachelors of Technology

In Information Technology By

Ritik Kumar Nayak
(Enrollment No: HBTU180108023)
Rishabh R. Chaudhary
(Enrollment No: HBTU180108022)
Mohak Nigam
(Enrollment No: HBTU180108019)
Rajyardhan Singh
(Enrollment No: HBTU180108021)

Under the supervision of

Prof.Raghuraj Singh

Department of Computer Science and Engineering,

Harcourt Butler Technical University, Kanpur



To the
School of Engineering
Harcourt Butler Technical University, Kanpur
(June, 2022)

## Web Scraper

A Project Report Submitted In Partial Fulfillment of the Requirements For the Award of the Degree of

### **Bachelors of Technology**

In Information Technology By

Ankesh Ojha
(Enrollment No: HBTU180108007)
Ashutosh Bhalothia
(Enrollment No: HBTU180108008)
Sachin Kumar
(Enrollment No: HBTU180108024)
Amrendra Singh
(Enrollment No: HBTU180108005)

Under the supervision of

Prof.Raghuraj Singh Department of Computer Science and Engineering, Harcourt Butler Technical University, Kanpur



To the
School of Engineering
Harcourt Butler Technical University, Kanpur
(Formerly Harcourt Butler Technological Institute, Kanpur)
(May, 2022)

## Cattle Care Application

A Project Report Submitted In Partial Fulfillment of the Requirements For the Award of the Degree of

## Bachelor of Technology

In

## INFORMATION TECHNOLOGY

By

Milind Kaushal

(Enrollment No: HBTU180108018)

Divyansh Tripathi

(Enrollment No: HBTU180108015)

Saumya Rastogi

(Enrollment No: HBTU180108026)

Under the supervision of

Dr. Anita Yaday

Associate Professor

Department of Computer Science and Engineering, Harcourt Butler Technical University, Kanpur



To the

School of Engineering
Harcourt Butler Technical University, Kanpur
(Erstwhile Harcourt Butler Technological Institute, Kanpur)

1

## **Emotion Recognition and Depression Detection**

A Project Report Submitted

By-

Alankrita Mishra(180108002)

Shipra Roy(180108027)

Yukti Gangwar(180108030)

Under the supervision of-

Dr. Prabhat Verma

(Assistant Professor, Department of Computer Science and Engineering)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR.

Project Report On

### STOCK MARKET PREDICTION

Submitted
In partial fulfilment of requirements
for the degree of

Bachelor of Technology

IN

INFORMATION TECHNOLOGY



By

ANKESH KUMAR (180108006) AMIT KUMAR PATEL (180108004) TAQUIUDDIN (180108028) ALOK DIWEDI (180108003)

Under the supervision of

Dr. Prabhat Verma

Assistant Professor, CSE

### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING H.B.T.U, KANPUR

#### PROJECT SUPERVISOR

Dr. Prabhat Verma

Assistant Professor
Department of
Computer Science and Engineering

#### PROJECT IN-CHARGE

Dr. Raghuraj Singh

Professor

Department of

Computer Science and Engineering

## **Automated Rating of Online Reviews**

A Project Report Submitted In Partial Fulfillment of the Requirements For the Award of the Degree of

## **Bachelor of Technology**

ln

### INFORMATION TECHNOLOGY

By

Rajat Aggarwal

(Enrollment No: HBTU180108032)

Vaibhay Tripathi

(Enrollment No: HBTU180108029)

Pragya Katiyar

(Enrollment No: HBTU180108020)

Kapil Kumar Dwivedi

(Enrollment No: HBTU180108017)

Under the supervision of

Dr. Vandana Dixit Kaushik

**Assistant Professor** 

Department of Computer Science and Engineering, Harcourt Butler Technical University, Kanpur



To the

School of Engineering

Harcourt Butler Technical University, Kanpur

(Erstwhile Harcourt Butler Technological Institute, Kanpur)

## Personality Prediction Using CV Analysis

A Project Report Submitted

In Partial Fulfillment of the Requirements For the Award of the Degree of

Bachelors of Technology In

Information Technology By

Avantika Singh Parihar (Enrollment no: HBTU180108010) Avinash Dixit (Enrollment No: HBTU180108011) Ayushi Jaiswal

Under the supervision of

(Enrollment No: HBTU180108012)

Dr. Vandana Dixit Kaushik Assistant Professor

Department of Computer Science and Engineering, Harcourt Butler Technical University, Kanpur



To the School of Engineering

HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR

(Formerly Harcourt Butler Technological Institute, Kanpur) (May 2022)

# Project Report On Health Workforce Data Visualization

Submitted in partial fulfillment of requirement for the award of

### Master of Computer Applications

Under the guidance of

Dr. Narendra Kohli (Head of Department)

By

Aviral Dixit	(Roll No. 200231020)
Antra Tiwari	(Roll No. 200231015)
Monisha Chaurasia	(Roll No. 200231036)
Shubham Chaurasia	(Roll No. 200231065)



Department of Computer Science & Information Technology

HARCOURT BUTLER TECHNICAL UNIVERSITY

Kanpur, Uttar Pradesh

### Project Report on SENTIMENT ANALYSIS OF PRODUCT-BASED REVIEWS

# Submitted in particular fulfillment of the requirement for the degree of

### MASTER OF COMPUTER APPLICATION

## Under the esteemed guidance of Prof. NARENDRA KOHLI

Professor & Head By

AAKASH GAUR	(Roll no. 200231001)
AJAY KUMAR VERMA	(Roll no. 200231007)
ANURAG SINGH	(Roll no. 200231016)
AYUSHI VERMA	(Roll no. 200231021)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING HARCOURT BUTLER TECHNICAL UNIVERSITY, KANPUR (2022)

## Comparative Study Amazon Apparel Recommendation System

Dissertation submitted in partial fulfillment of the requirements for the degree of

## Master of Computer Application (MCA)

By

Akshika Mittal (200231011)

Mohd Shadab (200231035)

Tuba Khan (200231075)

Shivangi (200231064)

Under the guidance of

Prof. Raghuraj Singh



# Harcourt Butler Technical University Academic Year 2021-22

# EMOTION DETECTION THROUGH SPEECH

A Project Report Submitted In Partial Fulfilment of the Requirements For the Award of the Degree of

### MASTER OF COMPUTER APPLICATION

In

Computer Science

By

Neha Singh

(Enrollment No: HBTU200231038)

Harshit Shukla

(Enrollment No: HBTU200231027)

Prabhat Kumar Tiwari

(Enrollment No: HBTU200231043)

Under the supervision of
Dr. Raghuraj Singh
Professor
Department of Computer Science and Engineering,
Harcourt Butler Technical University, Kanpur



To the

School of Engineering

Harcourt Butler Technical University, Kanpur (Formerly Harcourt Butler Technological Institute, Kanpur)

## A project Report

### ON

## Malicious Node Detection in Wireless Network

### MASTER OF COMPUTER APPLICATIONS

### Submitted By:

Lokesh Katiyar (200231033) Kamal Nayan Rai (200231031) Pransu Katiyar (200231046) Rishabh Verma (200231053)

> Under the Guidance of Dr. Anita Yadav (Associate Professor)



HARCOURT BUTLER TECHNICAL UNIVERSITY KANPUR, 208002, U.P.

## Distance Calculator App

# Dissertation submitted in partial fulfillment of the requirements for the degree of

### MASTER OF COMPUTER APPLICATIONS

By

Manali Sharma (200231034)

Akanksha Singh (200231008)

Priya Katiyar (200231048)

Isha Agrawal (200231029)

Under the esteemed guidance of

Dr. Anita Yadav



HARCOURT BUTLER TECHNICAL UNIVERSITY KANPUR.208002,INDIA MAY 2022

### SALES PREDICTION OF SUPERMARKET

Project Report Submitted in Partial Fulfillment of the Requirement for the Degree of

## MASTER OF COMPUTER APPLICATION 2020-2022

Under the guidance of

Prof. Prabhat Verma

By:

Nivedita Jain (200231039) / 06

Avani Singh (200231019) / 06

Pratibha Vishwakarma (200231047) / 06

Dheeraj Tiwari (200231024) / 06



Department of Computer Science and Engineering Harcourt Butler Technical University Kanpur, U.P

### PROJECT REPORT

### ON

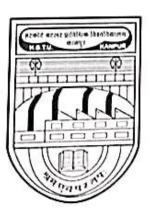
## STOCK PRICE PREDICTION SYSTEM

Submitted in the Partial fulfilment of requirement for the award of

# MASTER OF COMPUTER APPLICATION

## Under the guidance of Dr. Prabhat Verma (Professor CSE Department)

Aman Kant Savita (Roll no. 200231012)
Chirag Papneja (Roll no. 200231023)
Prabhat Kumar Kohliyan (Roll no. 200231042)
Rahul Mohan (Roll no. 200231051)



Department of Computer Science and Engineering Harcourt Butler Technical University June 2022

## **EMOJIFIER USING CNN**



A project report submitted to
Harcourt Butler Technical University
Kanpur, U.P.
towards partial fulfilment of
the degree of

# MASTER OF COMPUTER APPLICATION 2020-2022

### Guided by:

Dr. V.D. Kaushik

Assistant Professor

C.S.E. Department

### Submitted by:

Shubham Logani (200231066)

Prachi Gupta (200231044)

Kushagra Verma (200231032)

### Submitted to:

Dr. Anita Yaday

Associate Professor

C.S.E. Department

## **KARKINOS**

Brain Tumor Detection Using Deep Learning Models

Dissertation submitted in partial fulfillment of the requirements for the degree of

## MASTER OF COMPUTER APPLICATION By

Vartika Jaiswal (200231078) Sushant Baghel (200231074) Navjyot Kumar (200231037) Suryansh Singh (200231073)

Under the esteemed guidance of

Dr. V.D. Kaushik Assistant Professor



Department of Computer Science and Engineering
Harcourt Butler Technical University
Kanpur, U.P.

Session: 2020-2022

### Internship Report

### A Project Report Submitted

In Partial Fulfillment of the Requirements for the Award of the Degree of

Master of Computer Application (MCA)

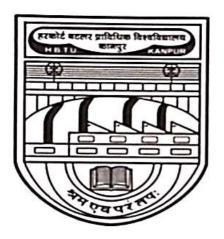
(2019-2022)

Ву

ANSHIKA GOVIL

(Enrollment Number: HBTU190231012)

Under the supervision of SAMSUNG DATA SYSTEMS INDIA PVT. LTD.



To The

School of Engineering

Harcourt Butler Technical University, Kanpur

(June,2022)

#### CERTIFICATE OF INTERNSHIP

Sender : Anuj Sharma < s.anuj@samsung.com > Professional/HR Group/SDS India

Date: 2022-05-18 13:13 (GMT+5:30)

Title: Samsung Data Systems - Interns Candidate Status - Harcourt butler technical university (HBTU)

To: null < Placement@hbtu.ac.in >

CC: Suresh Chander < s.chander@samsung.com>

Dear TPO,

Hope you're doing good ..!

Please refer the below table -

S.No.	Name	Institut e	Degree	Branch	Mobile	Email Address	Start Date	Internship End
28	Anshika Govil	нвті	B.Tech	Computer Application	8743939908	govilanshika2@gmsil.com	Feb 01, 2022	June 30, 2022

#### Regards

#### Anuj Sharma

Human Resource / Manager

Samsung Data Systems India Private Limited

T+91-124-418-1234, M+91-90-1575-5566

Esanuj@samsung.com

in:-linkedin.com/in/anujlinkin/

https://www.samsungsds.com/india/en/

## Internship's Tasks

A Project Report Submitted

In Partial Fulfilment of the Requirements for the Award of the Degree of

Master of Computer Application

(2019-2022)

By

Deepak Mishra

(Enrolment No: HBTU190231024)

Under the Supervision of

Mr. Chintan Gupta



### School of Engineering

Harcourt Butler Technical University, Kanpur

(Formerly Harcourt Butler Technological Institute, Kanpur)

Academic Year: 2021-2022

### CERTIFICATE



Date: 07/05/2022

#### To Whom It May Concern:

This is to certify that <u>Deepak Mishra</u> S/O Mr. Ganga Sagar Mishra who is the student of MCA final Uyear (Roll Number: 190231024) from Harcourt Butler Technical University, Kanpur has done his Internship Program from Our Organization <u>HP Internship India From 05 Feb 2022</u> to **05 July 2022** in Kanpur.

His Internship is based on Java.

During the internship period <u>Deepak Mishra</u> has shown keen interest in project development and analysis phase and to the best of our knowledge. He has shown sound knowledge of the subject and has good grasping power.

For HP Internship India

Mr. Chintan Gupta (Project Manager)

www.InternshipIndia.in

### Internship's Tasks

A Project Report Submitted In Partial Fulfillment of Requirements For the Award of the Degree of

### Master of Computer Application

(2019-2022)

Ву

Arpit Raghubansi

(Enrolment No: HBTU190231013)

Under the Supervision of

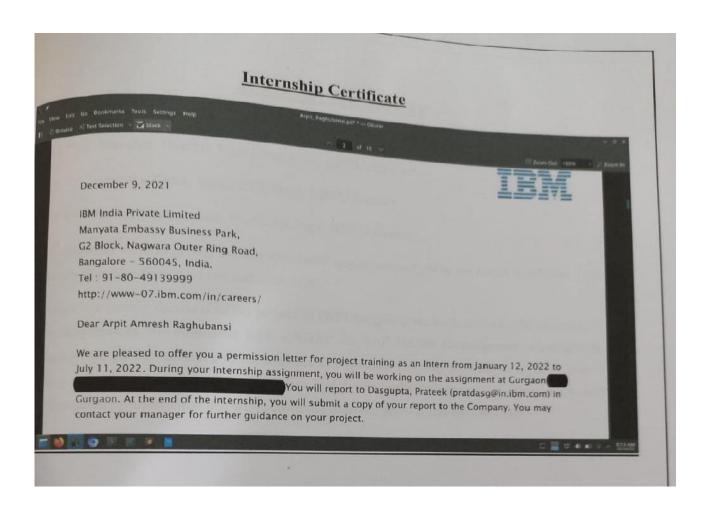
Mr. Prateek Das Gupta Mrs. Rekha Satyanath



To the School of Engineering

Harcourt Butler Technical University, Kanpur

June, 2022



# Internship's Tasks

# A Project Report Submitted

In Partial Fulfilment of Requirements for the Award of the Degree of

# **Master of Computers Application**

(2019-2022)

By

Smriti Gupta (Enrollment No: HBTU190231035)

Under the Supervision of

Nagarro (thinking break through), Gurgaon.

Mr.OM Prakash Miss Parul Parmar



School of Engineering
Harcourt Butler Technical University, Kanpur
(Formerly Harcourt Butler Technological Institute,
Kanpur)

(June 2022)

### CERTIFICATE



# TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Smriti Gupta** joined Nagarro Software Pvt. Ltd. on 09<sup>th</sup> March,2022 fora six-month training. She has been working on Java language and her performance has been satisfactory.

Her project is handled by Swati Yadav from the People Enablement team.

Swati Yadav

Director, People

EnablementNagarro

Software Pvt. Ltd.

### SMART PLANNING AND EXECUTION APP PROCESS DOCUMENT

A Project Report Submitted

In Partial Fulfilment of the Requirements for the Award of the Degree of

Master of Computer Application

(2019-2022)

By

Kajul Sharma

(Enrollment No: HBTU190231032)

Under the Supervision of

Mr. Sumit Dwivedi



School of Engineering

Harcourt Butler Technical University, Kanpur
(Formerly Harcourt Butler Technological Institute,
Kanpur)

June 4, 2022



# TO WHOMSOEVER IT MAY CONCERN

This is to certify the Ms. Kajul Sharma of MCA - Harcourt Butler Technical University, Kanpur is doing internship at Yamaha Motor Solutions India Ltd. since 14" February 2022 .

For.

Yamaha Motor Solutions India Pvt Ltd

ivagentia Rawai

DGM - HR

YAMAHA MOTOR SOLUTIONS (INDIA) PRIVATE LIMITED

19 6 Martine Food Faridabad, Haryana - 121008, India Phone -91 12+ 6006595, Fax +91-129-4013957

No. Netry Place Behind IFCI Tower, New Delhi — [10019, India Pt. 19-11-11802255 | Fax: +91-11-41802200 Line: Vinelinyaniaha-motor-india som Line: | Mito://www.ymst.in/ CBLL17900001.7007FTC118736

Total Quality with Team Powe

# ONLINE PARKING SYSTEM

# A Project Report

Submitted in fulfilment of the Requirement for the award of the degree of

# Master of Computer Applications

(Batch 2019- 2022)

To



By

Pramod Kumar Chauhan (190231049)

Under the Supervision Of

Mr. Shubham Yadav

# CERTIFICATE



### MIDBRAINS TECHNOLOGIES

#### Address

2<sup>nd</sup> floor, Uttam Shanti building above Yamaha Showroom near Pandit Petrol Pump Dange chowk, Hinjewadi, Pume, Maharashtra 411033

#### Email

info@midbrains.in

#### Website

www.midbrains.in

#### Offer Letter

Date: 31/12/2021

Dear Pramod Kumar Chauhan,

We refer to the discussions held with you earlier and take pleasure in offering you as a Full Stack Developer Intern in our organization. You are requested to join us on 03-January-2022. Your job specifications will be provided to you separately.

We shall be offering you internship duration of 6 months with no stipend as discussed mutually at the time of interview you had with us. All other benefits will be as per the existing policy of an organization for which you will be entitled upon your joining the organization.

This appointment is offered to you based on the information provided by you in writing and during the course of subsequent correspondence and meetings. In the event of any of the information being proved to be incorrect, the organization will view it seriously and take appropriate action.

We look forward to a very rewarding mutual relationship to the benefit of yourself and the company.

Yours faithfully,

**HR** Department

# Internship's Tasks

A Project Report Submitted

In Partial Fulfillment of the Requirements For the Award of the Degree of

Master of Computer Application

(2019-2022)

By

Rajat Pal

(Enrollment No: HBTU190231052)

Under the Supervision of

Ms. Nainshree Joshi



School of Engineering

Harcourt Butler Technical University, Kanpur (Formerly Harcourt Butler Technological Institute, Kanpur)

June 4, 2022



STRICTLY CONFIDENTIAL

Dated: 31st May, 2022

hr@celebaltech.com enterprisesales@celebaltech.com

1 www.celebaltech.com

0141-4700659

India: A-2 7th floor, UDB Corporate Tower, J.L.N. Marg, Jaipur

# Ongoing Internship Certificate

# To Whomsoever It May Concern

This is to certify that **Rajat Pal** had undertaken Internship with Celebal Technologies, Jaipur, starting from 1st January 2022 in **Big Data & EDW** Department.

During his 5 months of Internship, he was working under the mentorship of Ms. Nainshree Joshi.

Best Regards

Teyal

Tejal Mangal Sr. Executive Human Resources Celebal Technologies

#### Project Report

#### Submitted

In Partial Fulfilment of the Requirements for the Award of the Degree of

#### Master of Computer Application (MCA)

(2019-2022)

Ву

Aarzoo Rathi

(Enrolment No: HBTU190231034)

Under the Supervision of

Mr Praveen Jaiswal



Harcourt Butler Technical University, Kanpur

#### Certificate of Internship



Date: 02nd May 2022

#### TO WHOM SO EVER IT MAY CONCERN

This is to certify that Ms. Aarzoo Rathi Roll No:- 190231034, a student of Master of Computer Application from Harcourt Butler Technical University Kanpur, has successfully completed her 3 months (01 Feb to 30 Apr) long internship at Tycho Technologies Pvt. Ltd.

During her internship she has worked on the project entitled "E-commerce" for Flutter Development the work responsibilities performed by Ms. Aarzoo Rathi was to develop Frontend, the project developed for Android and iOS device. It is original work done by Ms. Aarzoo Rathi under the guidance of Mr. Praveen Jaiswal.

We wish her success in life.

Warm Regards,

Nidhi Singh

Tycho technologies Pvt. Ltd.

Tycho Technologies Pvt. Ltd. 802 Basement, H-182 Sec-63, Noida 201309, Mobile: 9650982333

# **Municipal Corporation Online Complaint Handling Process**

A Project Report Submitted In Partial Fulfillment of the Requirements for the Award of the Degree of

Master Of Computer Application (2019-22)

By:

ASHUTOSH TRIPATHI

(Enrollment No. HBTU190231016)

Under the Supervision of Mr. Sanjay Shelar



Harcourt Butler Technical University

To the

School of Engineering

Harcourt Butler Technical University, Kanpur (Formerly Harcourt Butler Technological Institute, Kanpur) (June, 2022)



Office Address: 04th floor, S. M. Tower, Above Jijamata bank, Karvenagar, Pune-411052. E-mail: info@webhub.co.in. Website. www.webhub.co.in.

REF: INT-webhub295-2022

Date: 02/06/2022

## TO WHOM IT MAY CONCERN

This is to certify that Mr. Ashutosh Tripathi student of MCA from Harcourt Butler Technical University has successfully completed a project on "Municipal Corporation Online Complaint Handling Process" as a partial fulfillment of requirement towards 06th semester of his MCA program.

Duration- 02nd Feb 2022 to Till Completion.

Technology- Java and MYSQL

During the period of internship with us he was found punctual, hardworking and inquisitive.

As abided by intellectual property and confidentiality policy of Webhub Technology Pune. He is unable to produce the source code of above mentioned project.

We wish his every success in life.

Del Const

YOURS SINCERELY,

FOR WEBHUB TECHNOLOGY PUNE

www.webhub.co.in

# SIGN LANGUAGE TO TEXT CONVERSION FOR DEAF AND DUMB

A Project Report Submitted
In Partial Fulfillment of the Requirements
For the Award of the Degree of
Master of Computer Application
(2019-2022)

By

Sagarika Jaiswal

(Enrollment No: HBTU190231058)

Under the Supervision of

Mr. Arjun Tiwari

Mr. Ritesh Sachan



To the
School of Engineering
Harcourt Butler Technical University, Kanpur
(Formerly Harcourt Butler Technological Institute, Kanpur)
(June 4, 2022)



150 9001 2008 1 T No:GACB1998

Regd. By U.F. Govt. Regd. No.-K-816

2/5, (M.I.G.) BARRA-7, KANPUR

Ph.: 0512-3291639 Mo.: 9889999106

### TO WHOM SO EVER IT MAY CONCERN

This is to certify that Miss. Sagarika Jalswal has completed a supervised and mentored internship as an intern at Sky Base Computer Institute.

Duration - three months from 1 Eet 2032 to 10" May, 2022.

She has majorly worked on various machine learning & deep learning algorithms. During her internship benon she was exposed to various processes and was found sincere, hard working technically sound and result oriented.

Her association with us is much appreciated and we wish her all the best her future endeavors.



BHARAT SANCHAR NIGAMLIMITED

OFFICE OF THE GENERAL MANAGER TELECOM DISTRICT KANPUR - 208001

### CERTIFICATE

This is to Certify that Mr./Miss Panth Shukle
a student of Degree/Diploma/Post Graduate in B. Tick CE.C.E.)
at H. B. T. U. Kan furt
has successfully completed his/her 04 Week Vocational / Summer Training/
Internship with effect from 19.07.2021 to 14.08.2021 in Kanpur Telecom District.
Suite good fundonmare We wish every success in his/her Life

Dated : 23:08:2921

Prepared by

Checked by

Asstt. General Manager (Admn.) Kanpur Telecom District

No: RKYPGNB519-2021-1669001



# **BHARAT SANCHAR NIGAM LIMITED**

( A Govt. of India Enterprise )

### Netaji Subhash Chandra Bose Telecom Training Centre

( A Regional Telecom Training Centre of BSNL)

#### CERTIFICATE

This is to Certify that

### ANAMIKA YADAV

has successfully completed 4 weeks online INDUSTRIAL TRAINING on ADVANCE TELECOM TECHNOLOGY with effect from 19.07.2021 to 13.08.2021 at NSCBTTC, Kalyani.

We wish him/her all the best for a bright future.

Date: 14.08.2021

(Principal)

No: RKYPGNB519-2021-1669009



# **BHARAT SANCHAR NIGAM LIMITED**

( A Govt. of India Enterprise )

### Netaji Subhash Chandra Bose Telecom Training Centre

( A Regional Telecom Training Centre of BSNL)

#### CERTIFICATE

This is to Certify that

### UTKARSH KUMAR YADAV

has successfully completed 4 weeks online INDUSTRIAL TRAINING on ADVANCE TELECOM TECHNOLOGY with effect from 19.07.2021 to 13.08.2021 at NSCBTTC, Kalyani.

We wish him/her all the best for a bright future.

Date: 14.08.2021

(Principal)

BHARAT SANCHAR NIGAMLIMITED

OFFICE OF THE GENERAL MANAGER TELECOM DISTRICT KANPUR - 208001

### CERTIFICATE

Dated: 23-08-2021

Prepared by

Checked by

Asstt. General Manager (Admn.) Kanpur Telecom District

No: RKYPGNB519-2021-1669005



# **BHARAT SANCHAR NIGAM LIMITED**

( A Govt. of India Enterprise )

### Netaji Subhash Chandra Bose Telecom Training Centre

( A Regional Telecom Training Centre of BSNL)

#### CERTIFICATE

This is to Certify that

#### HIMKANT TRIPATHI

has successfully completed 4 weeks online INDUSTRIAL TRAINING on ADVANCE TELECOM TECHNOLOGY with effect from 19.07.2021 to 13.08.2021 at NSCBTTC, Kalyani.

We wish him/her all the best for a bright future.

Date: 14.08.2021

(Principal)

#### **CANDIDATE'S DECLARATION**

We hereby declare that the Industrial Training report entitled "Photonic crystals" submitted by us to Harcourt Butler Technical University, Kanpur in partial fulfilment of the requirement for the degree B.TECH in ELECTRONICS ENGINEERING is a record of bonafide training work carried out by us under the guidance of Mr. Partha Saha. My supervisor should not be held responsible for full or partial violation of copyright or intellectual property rights.

#### Name & Signature:

- <u>1.</u> Hardik Batheja 180106012
- 2. Muskan Dubey 180106021
- 3. Shreya Sachan 180106037 Shreya Sachan

4.Siddhant Jain 180106039

on\_

**SUPERVISOR'S NAME & SIGNATURE:** 



Dr. Priya Ranjan Muduli

Assistant Professor, Department of Electronics Engineering, Indian Institute of Technology (BHU) Varanasi, Uttar Pradesh -221005, INDIA

Web: https://iitbhu.ac.in/dept/ece/people/prmuduliece

Date: 27-08-2021

#### LETTER OF RECOMMENDATION FOR PRIYANSHI OMER

I am writing this letter to give my highest possible recommendation for Priyanshi Omer.

I started knowing Miss Priyanshi Omer through her technical project work during the summer of 2021. She approached me about the possibility of an internship at the Indian Institute of Technology (BHU), Varanasi, India. After getting the general outline of the project, she worked independently on a project titled "A Comprehensive Study of Automatic Detection of Covid-19 from Chest Radiographic Images."

I was pleased with Miss Omer's creative mind and work ethic during her research project. Her interpersonal skills are excellent. Miss Omer also showed excellent problem-solving ability.

In summary, Miss Omer is a good student. Her knowledge of the English language is good. Her research potential and programming expertise are excellent.

I give her my highest recommendation.

Thanks and regards,

Yours sincerely

Dr. PRIYA RANJAN MUDULI



#### NATIONAL INSTITUTE OF TECHNOLOGY

An Institute of National Importance Under MHRD, Govt. of India WARANGAL-506004, Telangana, INDIA

( Formerly Regional Engineering College, Warangal)



Dr. Md. Farukh Hashmi

Assistant Professor

Department of Electronics and Communication Engineering

Phone:- +918702462429(O)

Mobile:- +919666740604

Email: - mdfarukh@nitw.ac.in

#### SUMMER INTERNSHIP CERTIFICATE

(To Whom It May Concern)

This is to certify that Ms. Richa Singh (Roll No. 180106029) student of III year B.Tech., Electronics Engineering of Harcourt Butler Technical University (HBTU), Kanpur (U.P.) is worked under my guidance in the field of Biomedical Imaging and Deep learning entitled "Optic Disc Segmentation Using Fundus Images" from date 20/06/2021 to 5/08/2021 for a period of forty five days. This work was performed online mode under Computer Vision Lab of ECE Department, National Institute of Technology, Warangal. Her dedication to this Summer internship is very much appreciated and I wish her for the best future ahead.

(Dr. Mohammad Farukh Hashmi)

Assistant Profession Service Assistant Profession Service Department of Exchanges Automation Automation Service Servic



# NATIONAL INSTITUTE OF TECHNOLOGY

An Institute of National Importance Under MHRD, Govt. of India WARANGAL-506004, Telangana, INDIA

( Formerly Regional Engineering College, Warangal)



Dr. Md. Farukh Hashmi

Assistant Professor

Department of Electronics and Communication Engineering

Phone:- +918702462429(O)

Mobile:- +919666740604

Email:- mdfarukh@nitw.ac.in

### SUMMER INTERNSHIP CERTIFICATE

(To Whom It May Concern)

This is to certify that Ms. Upagyya Dixit (Roll No. 180106047) student of III year B.Tech., Electronics Engineering of Harcourt Butler Technical University (HBTU), Kanpur (U.P.) is worked under my guidance in the field of Biomedical Imaging and Deep learning entitled "Optic Disc Segmentation Using Fundus Images" from date 20/06/2021 to 5/08/2021 for a period of forty five days. This work was performed online mode under Computer Vision Lab of ECE Department, National Institute of Technology, Warangal. Her dedication to this Summer internship is very much appreciated and I wish her for the best future ahead.

(Dr. Mohammed Farulth Hashmi)

Dr. M.D. RAS Assistant Professor Department of Electronics & Committee OF TECHNOLOGY NATIONAL INSTITUTE OF TECHNOLOGY NATIONAL INSTITUTE OF TECHNOLOGY