

Allenhouse Institute of Technology

Details of Projects_Major
Academic Session_2021-22

S. No.	Name of Program	Name of Project	Impact of the Project (on Industry/Social/Environ. etc.)	Name of Supervisor	No. of Students associated	Name and Roll No. of Students
1	B.TECH_CE	Design, Planning and Cost Estimation of A G+5 Residential Building	Low cost housing	Miss Shikha Pal	4	1. Pranjul gupta 2. Himanshu shukla 3. Ritesh kumar sharma 4. Yogendra kumar gautam
2	B.TECH_CE	Soil classification of Kanpur City using Q-GIS software	Able to Map soil profile of Various parts of city	Miss Monika Srivastava	4	1. Anuj kumar bose 2. Shivam Chauhan 3. Priya Verma 4. Faizan Ansari
3	B.TECH_CE	Soil Rehabilitation by lime	Improvement in Soil properties	Mr. Anurag Chaturvedi	5	1. Sangya 2. Karan dubey 3. Hamid Hussain 4. Shivam singh 5. Nikhil Yadav
4	B.TECH_CE	Improvement of Compressive strength of Pervious Concrete	It will be helpful to water logging problem on the sides of road.	Mr. Praneet Madhav	5	1. Amaan ali 2. Nihal kabir 3. Shweta 4. Dipin kumar 5. Asif ali
5	B.TECH_CE	Design of flexible pavement	Study and Design of Flexible Pavement, Compare the result of Flexible pavement with rigid pavement.	Mr. Praneet Madhav	5	1. Mohammed Azhar badar 2. Yoganjali Verma 3. Pranjul Singh 4. Bhanu Pratap Singh 5. Himanshu sharma
6	B.TECH_CE	Steel Fibre Reinforcement Concrete	Smart Concrete	Mr. Praneet Madhav	2	1. Sayyed Sameer Hasan 2. Abhishek Kumar

(Signature)

Director
Allenhouse Institute of Technology
Farma, Kanpur-208008

CERTIFICATE

This is to certify that Project Report entitled "STEEL FIBER REINFORCED CONCRETE" which is submitted by Sayyed Sameer Hasan (1850500027, Abhishek Kumar (1850500002)&, in partial fulfilment of the requirement for the award of degree B.Tech in Department of Civil Engineering of DR. APJ ABDUL KALAM TECHNICAL UNIVERSITY is a record of the candidate own work carried out by them under our supervision. The matter embodied in this Project work is original and has not been submitted for the award of any other degree.

Date: 03/06/2022

Signature: 

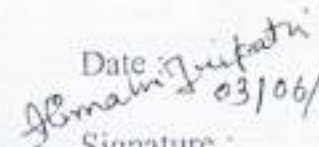
Internal
Examiner

Date: 03/06/22

Signature: 

HOD

Date

 03/06/22

Signature:

External
Examiner




Director
Allenhouse Institute of Technology
Roama, Kanpur-208008

CERTIFICATE

This is Certified that Mohd Faizan Ansari(1850500017), Priya Verma(1850500021), Shivam Chauhan(1850500028), Anuj Kumar Bose(19050500009001) has carried out the project work presented in this project report entitled "Soil Classification of Kanpur City using Q-GIS" for the award of Bachelor of technology from Dr. A.P.J, Abdul Kalam Technical University, Lucknow under my supervision. The project embodies the result of original work, and studies are carried out by these students themselves and the contents of the project do not form the basis of the award of any other degree to the candidates or anybody else from this or any other University/Institution.

Ms. Monika Srivastava

Assistant Professor,

Department of Civil Engineering

Allenhouse Institute of Technology, Kanpur

Date: - 03/06/2022


Guide Sign:


HOD Sign:



Examiner Sign:




Director
Allenhouse Institute of Technology
Roama, Kanpur-208008

CERTIFICATE

This is to certify that project report entitled “DESIGN OF FLEXIBLE PAVEMENT” which is submitted by Himanshu sharma , Mohammad Azhar Badar , Pranjul Singh , Yoganjali Verma and Bhanu Pratap singh in partial fulfillment of the requirement for the award of degree of Bachelor of Technology in Civil Engineering from ALLENHOUSE INSTITUTE OF TECHNOLOGY under A.P.J. Abdul Kalam Technical University , Lucknow is a record of the candidates own work carried out by them under our supervision. The matter embodied in this thesis is original and has not been submitted for the award of any other degree.


.....
10/3/06/22

Mr. Praneet Madhav


(Head of Department)

Department of Civil Engineering

Allenhouse Institute of Technology

Roama , Kanpur , UP , India




.....

External Examiner


Director
Allenhouse Institute of Technology
Roama, Kanpur-208008

CERTIFICATE

This is certified that **Hamid Hussian, Nikhil Yadav, Sangya, Shivam Singh and Karan Dubey** has carried out the research work presented in this titled **"SOIL REHABILITATION BY LIME, CHECKING SUITABILITY AND STABILITY OF RECLAIMED SOIL"** (Soil Stabilization) for the award of 'Bachelor of Technology' in 'Civil engineering' from Dr. A.P.J. Abdul kalam Technical University, Lucknow under our supervision. This report embodies result 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 any other degree to the candidate or to anybody else from this or any other university/institution.

Anurag
03/06/21

Mr. Anurag Chaturvedi
(Assistant Professor)
Department of Civil Engineering
Allenhouse Institute of Technology
Rooma, Kanpur, U.P., India



Hemanshu Jaiswal

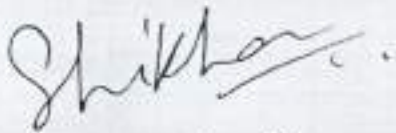
External Examiner

Director
Allenhouse Institute of Technology
Rooma, Kanpur-208008

CERTIFICATE

This is to certify that the project report entitled "DESIGN, PLANNING AND COST ESTIMATION OF A G+5 RESIDENTIAL BUILDING" is a Bonafede work carried out by "Yogendra Kumar Gautam(1750500031), Pranjul Gupta(1850500019), Ritesh Kumar Sharma(1850500024), Himanshu Shukla(1905050009002)" who carried out the project work undermy supervision.

To the best of my knowledge this work has not been submitted in part or full for any Degree or Diploma to this University or elsewhere.



Guide (Asst. Prof.)

Ms. Shikha Pal

Sign.



External Examiner

Sign.

Hod

Sign



Director
Allenhouse Institute of Technology
Roama, Kanpur-208008

Allenhouse Institute of Technology

Details of Projects Major Minor Mini (CSE)

Academic Session 2021-22

S. No.	Name of Program	Name of Project	Impact of the Project (on Industry/Social/ Environ. etc.)	Name of Supervisor	No. of Students associated	Name and Roll No. of Students
1	B.Tech (CSE)	EYENAK	An aid to visual impaired.	Mr. Rajendra Rajouria	5	1. Abhinav Yadav - 1850510002 2. Gaurav Singh Pal - 1850510017 3. Mohd. Sufyan - 1850510027 4. Pushendra Kamal - 1850510034 5. Sonal Gupta - 1850510054
2	B.Tech (CSE)	Google Chrome Extension to detect Depression	Detection of depression in working personnel	Mr. Rahul Kumar Singh	5	1. Anamta Aftab - 1850510005 2. Anas Ali - 1850510006 3. Bhavya Mehrotra - 1850510013 4. Nikhil Sahu - 1850510031 5. Shiwanshu Singh - 1850510053
3	B.Tech (CSE)	E-Voting using Blockchain	Contribution to secure distant polling	Mr. Aviral Awasthi	3	1. Abhay Chaurasiya - 1850510001 2. Saransh Batham - 1850510045 3. Tuba Khalid - 1850510059
4	B.Tech (CSE)	AI Proctored Online Exam	Allowing online exams in secured environment	Mr. Apoorv Mishra	3	1. Akash Singh - 1850510003 2. Anshika Singh - 1850510010 3. Sandhya Yadav - 1850510042
5	B.Tech (CSE)	Stock Market Prediction	Helping the investors to make investments	Ms. Richa Mishra	2	1. Bhaskar Tiwari - 1850510012 2. Rahul Gupta - 1850510036
6	B.Tech (CSE)	Deep Learning approach for Violence detection	To identify the nature of individuals/mob	Ms. Richa Mishra	5	1. Chandan Kumar - 1850510014 2. Harshit Rathore - 1850510018 3. Menjab Alam - 1850510026 4. Mohd. Danish - 1850510028 5. Shivam Singh - 1850510050
7	B.Tech (CSE)	HOUSE MANAGEMENT WEBSITE (The Rag-Man)	Helping customers to avail online services	Mr. Rahul Kumar Singh	5	1. Mohiuddin Khan - 1850510030 2. Ansh Saini - 1850510008 3. Rajat Kesarwani - 1850510037 4. Samarjeet Verma - 1905050108003 5. Shiv Charan - 1905050108004
8	B.Tech (CSE)	Health Portal: SWASTHA	Aid to remote and lonely patients	Mr. Anubhav Bewerwal	3	1. Rakhi Pal - 1850510038 2. Rohit Vishwakarma - 1850510039 3. Sunil Kumar Maurya - 1850510056
9	B.Tech (CSE)	News Application System	Online NEWS portal	Mr. Rajendra Rajouria	5	1. Ansh Singh - 1850510009 2. Anchal Sharma - 1850510020 3. Ayesha Bano - 1850510022 4. Roshni Bano - 1850510040 5. Shivani Gautam - 1850510051
10	B.Tech (CSE)	Online Music Streaming App	Online Music portal	Mr. Rajendra Rajouria	5	1. Ankita Tiwari - 1850510021 2. Komal Verma - 1850510025 3. Shivani Yadav - 1850510052 4. Sonali Singh - 1850510055 5. Supriya Verma - 1850510057
11	B.Tech (CSE)	Desktop Voice Assistant	Voice enabled Desktop Assistant	Ms. Richa Mishra	4	1. Shashank Dubey - 1850510047 2. Shiva Shukla - 1850510049 3. Vedansh Dubey - 1850510061 4. Suraj Pratap Singh - 1905050108005
12	B.Tech (CSE)	Covid-19 Detection From Chest X-ray Images Using CNN	Identify COVID symptoms	Mr. Rahul Kumar Singh	1	1. Eshu Awasthi - 1850510015
13	B.Tech (CSE)	Gesture Recognition System	To use Powerpoint presentations, etc without handling input devices	Mr. Rahul Kumar Singh	3	1. Anmol Dixit - 1850510007 2. Piyush Trivedi - 1850510033 3. Shiv Shankar Yadav - 1850510048
14	B.Tech (CSE)	Brain Tumour Detection	To help doctors in identifying brain tumour	Mr. Rajendra Rajouria	4	1. Suraj Vishwakarma - 1850510058 2. Sanjiv Kushwaha - 1850510043 3. Rahul Sharma - 1850510035 4. Vishal Vishwakarma - 1905050109001
15	B.Tech (CSE)	Handwritten Digit Recognition Using Neural Network		NO GUIDE	1	1. Anshuman Pratap Singh - 1850510011


Director
 Allenhouse Institute of Technology
 Rooma, Kanpur-205005

CERTIFICATE

This is to certify that Project Report entitled "Online Music Streaming Web Application (GAAMA)" which is submitted by in partial fulfillment of the requirement for the award of degree B. Tech. in Department of "Computer Science and Engineering" of Dr. A.P.J. Abdul Kalam Technical University, is a record of the candidate own work carried out by them under my supervision. The matter embodied in this thesis is original and has not been submitted for the award of any other degree to the candidates or to anybody else from this or any other University/Institutions.



Rajendra Rajoria
Assistant Professor

Dept. of Computer Science and Engineering
Allenhouse Institute of Technology, Kanpur, U.P, India

Date.....



Director
Allenhouse Institute of Technology
Kanpur, Kanpur-208008

CERTIFICATE

This is to certify that Project Report entitled "Online Music Streaming Web Application (GAAMA)" which is submitted by in partial fulfillment of the requirement for the award of degree B. Tech. in Department of "Computer Science and Engineering" of Dr. A.P.J. Abdul Kalam Technical University. Is a record of the candidate own work carried out by them under my supervision. The matter embodied in this thesis is original and has not been submitted for the award of any other degree to the candidates or to anybody else from this or any other University/Institutions.



Rajendra Rajoria

Assistant Professor

Dept. of Computer Science and Engineering

Allenhouse Institute of Technology, Kanpur, U.P, India

Date 31.05/22



Director
Allenhouse Institute of Technology
Roorna, Kanpur-208002

CERTIFICATE

This is to certify that this project report entitled "EYENAK" which is submitted by Team EYENAK of B. Tech IVth year of Allenhouse Institute of Technology, Kanpur, U.P., in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering, is a bonafide record of the work done and research carried out by these students under our supervision. It is further certified that this team has met the requirements for the project format contained in the University format manual, and that this project has met all the criteria and requirements asked during the presentation session. The content included in this project report has not been submitted earlier for the award of any other diploma or degree.

Signature: _____



Rajendra Rajouria
(Assistant Professor &
Project Guide)

Place: _____

Date: _____

31/5/22

Signature: _____



Rahul Singh
(Head of CSE Department &
Assistant Professor)

Place: _____

Date: _____

31/5/22




Director
Allenhouse Institute of Technology
Rokma, Kanpur-208008

iii

CERTIFICATE

This is to certify that project report entitled "Ream Tutor Identification" which was submitted by Suraj Yadavakuma (1850510056), Rahul Sharma (1850510033), Nagesh Kuchwaha (1850510045) and Yashal Yadavakuma (1850510060) has been reviewed and found fit for the award of B. Tech in Computer Science Engineering, Allenhouse Institute of Technology, U.P.A.T. Kanpur. However, the above mentioned project report is available only for the purpose of the award and has not been subjected for the award of any other degree.

1/1/2022
Signature
Project Supervisor
Mr. Rajendra Rajput
Department of CSE
Allenhouse Institute of Technology

Signature
Head of Department
Mr. Nagesh Kuchwaha
Department of CSE
Allenhouse Institute of Technology



[Handwritten Signature]
Director
Allenhouse Institute of Technology
Rooria, Kanpur-208004

CERTIFICATE

This is to certify that project report entitled "News Application System" which was submitted by Ansh Singh, Roshni Bano and Shivani Gautam, Anchal Sharma, Aysha Bano in submitted in partial fulfillment of the degree of B. Tech in Computer Science Engineering, Allenhouse Institute of Technology, of Dr. A.P.J. Kalam Technical University, Lucknow, is a record of the candidate own work carried out by him under our supervision. The matter embodied in this thesis is original and has not been submitted for the award of any other degree.

SIGNATURE

PROJECT COORDINATOR

Mr. ANUBHAV BEWERWAL

(Assistant Professor)

Computer Science and Engineering

SIGNATURE

HEAD OF THE DEPARTMENT

Mr. RAHUL SINGH

(Assistant Professor)

Computer Science and Engineering



3/15/22

SIGNATURE

PROJECT GUIDENCE

Mr. RAJENDRA RAJOURIA

(Assistant Professor)

Computer Science & Engineering

Director
Allenhouse Institute of Technology
Lucknow, Kashi-226012

CERTIFICATE

Certified that Chandan Kumar (1850510014), Harshit Rathore (1850510018), Mehtab Alam (1850510026), Mohd Danish (1850510028) and Shivam Singh (1850510050) have carried out the project work presented in this report entitled "Deep Learning approach for Violence Detection" for the award of Bachelor of Technology in Computer Science & Engineering from Dr. APJ Abdul Kalam Technical University, Lucknow under my supervision. The thesis embodies results of original work, and studies are carried out by the students themselves and the content of the thesis does not form the basis for the award of any other degree to the candidates or to anybody else from this or any other University/Institution.

Mrs. Richa Mishra

Assistant Professor

Dept. of Computer Science and Engineering

Allenhouse Institute of Technology,

Kanpur, U.P., INDIA

Date: ...31/5/2...



Director
Allenhouse Institute of Technology
Rooma, Kanpur-208008

CERTIFICATE


This is to certify that this project report entitled "DESKTOP VOICE ASSISTANT" which is submitted by Team DESKTOP VOICE ASSISTANT of B. Tech IVth -year of Allenhouse Institute of Technology, Kanpur, U.P., in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering, is a bonafide record of the work done and research carried out by these students under our supervision. It is further certified that this team has met the requirements for the project format contained in the University format manual, and that this project has met all the criteria and requirements asked during the presentation session. The content included in this project report has not been submitted earlier for the award of any other diploma or degree.

Signature: 

Richa Mishra
(Assistant Professor &
Project Guide)

Place: Kanpur

Date: May 31, 2022

Signature: 

Rahul Singh
(Head of CSE Department &
Assistant Professor)

Place: 

Date: 31/5/22


Director
Allenhouse Institute of Technology
Phase-2, Kanpur-208009

CERTIFICATE

*This is to certify that the project report entitled **STOCK MARKET PREDICTION** submitted by **Rahul Gupta (1850510036)**, **Bhaskar Tiwari (1850510012)** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science & Engineering** from **Dr. A.P.J. Abdul Kalam Technical University**, is a record of the candidate own work carried out by them under my supervision. The matter embodied in this thesis is original and has not been submitted for the award of any other degree to the candidates or to anybody else from this or any other University/Institutions.*



Richa Mishra

Assistant Professor

Dept of Computer Science and Engineering

Allenhouse Institute of Technology,

Kanpur, U.P, India

Date.....



*Director
Allenhouse Institute of Technology
Roosha, Kanpur-208003*

Allenhouse Institute of Technology, Kanpur
Electrical & Electronics Engineering

Session-2021-22

Sr. No.	Title Of Project	Students Name	Guided By	Date
1	Rover Controlling Through Arduino	Vivek Kumar Yadav	Mr. Rajeev Jha	10-06-2022
		Anurag yadav		
2	Audio Based writing Machine	Chandrakant	Ms. Aakanksha Bedi	10-06-2022
		Raghav shrivastava		
		Shiv Chadra		
		Anurag Kumar		
		Rishab Kumar gautam		




Director
Allenhouse Institute of Technology
Kanpur, Kanpur-208008

ROVER CONTROLLING THROUGH ARDUINO

A Project reported Submitted

in partial fulfilment of the requirements for the Degree of

BACHELOR OF TECHNOLOGY

in

ELECTRICAL AND ELECTRONICS ENGINEERING

By

Vivek Kumar Yadav (1905050219002)

Anurag Yadav (1905050219001)

Under the Supervision of

Mr. Rajeev Jha Sir

(Head of Department)



**DEPARTMENT OF ELECTRICAL AND ELECTRONICS
ENGINEERING**

Allenhouse Institute of Technology, UP, INDIA

Dr. A.P.J. Abdul Kalam Technical University, Lucknow (UP), INDIA

May 2022




Director
Allenhouse Institute of Technology
Rooma, Kanpur-208008

CERTIFICATE

This is to certify that Vivek Kumar Yadav (1905050219002) and Anurag Yadav (1905050219001) has carried out the project work presented in this report and titled "ROVER CONTROLLING THROUGH ARDUINO", for the award of Bachelor of Technology degree in Electrical and Electronics Engineering from Abdul Kalam Technical University, Lucknow under our supervision. The thesis embodies result of original work and studies are carried out by the student and the contents of the thesis do not for the basis for award of any other degree to the candidate or to anybody else from this for any other university/ Institution.



[Handwritten Signature]
10/6/22

Mr. Rajeev Jha Sir

Head of Department

Electrical and Electronics Engineering

Allenhouse Institute of Technology

Kanpur, U.P, INDIA

Date.....

[Handwritten Signature]
Director
Allenhouse Institute of Technology
Rooma, Kanpur-208008

“AUDIO BASED WRITING MACHINE”

Submitted by

NAME

ROLL NO.

Chandra Kant
Raghav Srivastava
Shiv Chandra
Amrag Kumar
Rishabh Kumar Gautam

1850521008
1850521010
1850521013
1850521005
1750521010

A

Thesis Submitted in Partial Fulfilment of the Requirements for the
Degree of

Bachelor Of Technology

In

ELECTRICAL & ELECTRONICS ENGINEERING



Under the guidance of
Ms. Aakanksha Bedi

Assistant Professor

Submitted to the

Department of Electrical & Electronics Engineering

ALLENHOUSE INSTITUTE OF TECHNOLOGY

KANPUR-208008

DR. A. P. J. ABDUL KALAM TECHNICAL UNIVERSITY

LUCKNOW-226031

May, 2022



Signature
Director
Allenhouse Institute of Technology
Roama, Kanpur-208008

CERTIFICATE

This is the Certificate that **Chandra Kant**(1850521008), **Raghav Srivastava** (1850521010),**ShivChandra**(1850521013),**AnuragKumar**(1850521005),**Rishabh Kumar Gautam** (1750521010).

has carried out the research work presented in this project entitled " **AUDIO BASED WRITING MACHINE**" for the award of **Bachelor of Technology** from **Dr. A.P.J Abdul Kalam Technical University** under my supervision. The project embodies result of original work, and studies are carried out by the students their self and the content of the project 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.


11/06/22

Project Coordinator

Mr. Darakshaw Hayat

(Assistant Professor)

Electrical & Electronics Engineering

Allen House Kanpur-208008


10/6/22

Project Guide

Ms. Aakanksha Bedi

(Assistant Professor)

Electrical & Electronics Engineering

Allen House Kanpur-208008




Director
Allenhouse Institute of Technology
Roama, Kanpur-208008

Allenhouse Institute of Technology
 Details of Projects_Major_Minor_Mini
 Academic Session_2021-22

S.No.	Name of Program	Name of Project	Impact of the Project (on Industry/Social/Bio/Environment, etc.)	Name of Supervisor	No. of Students assisted	Name and Roll No. of Students
1	B.TECH_EC	PHOTO-ELECTRIC POWER GENERATOR	Photo electricity is a revolutionary source of OPTICAL ENERGY. It convert the ambient vibration energy into the electrical energy.	Mr. Rajeev Kumar Sachari	4	1. Akshay Tiwari (1850531001) 2. Arjun Bhatnagar (1750531009) 3. Manoj Kumar (1850531014) 4. Suresh Kumar (1850531002)
2	B.TECH_EC	DUAL - AXIS SOLAR TRACKER	By using dual axis arrangement, The efficiency of Solar Tracker will be increased.	Mr. Shekhar Pandey	4	1. Anurag Gupta (1850531008) 2. Ananya Sen (1850531005) 3. Komal Gaudin (1850531011) 4. Shreya (1850531003)
3	B.TECH_EC	OBSTACLE AVOIDING CAR	This can be used to develop and avoidance behaviour program for a mobile robot / autonomous vehicles.	Mr. Manoj Prasad Das	4	1. Anurag Gupta (1850531008) 2. Komal Singh (1850531012) 3. Shikharan Prasad Singh (1750531003) 4. Vatsirwan Mishra (1850531023)

Details of Projects_Minor_Mini

S.N.	Name of Student	Session	Duration	Type	Category
1	Abdulrahman Zain Arsan				
2	Akash Kumar Shukla				
3	Adak Singh				
4	Anil Kumar				AAA's security level IPv6 network campus design
5	Anshu				
6	Anush Gupta				Solar alarm chime and door chime car
7	Anurag Singh				Online examination and evaluation system app
8	Ayush Jaiswal				Online examination and evaluation system app
9	Km Khushi Chaurasia				Online examination and evaluation system app
10	Kim Pooram Bhengra				
11	Km Riya Verma				
12	Km Saanya Singh				Online examination and evaluation system app
13	Km Shweta				
14	Km Soham				
15	Mohd Ashraf				AAA's security level IPv6 network campus design
16	Nalush Kumar				
17	Piyush Kumar Shivastava				
18	Prateek Kumar				
19	Sonal Jaiswal				Online examination and evaluation system app
20	Shubham Vashwakarna				
21	Siddhant Jaiswal				Online examination and evaluation system app
22	Sneha Singh				Solar vacuum cleaner and four wheels Car
23	Tanya Pathak				AAA's security level IPv6 network campus design
24	Ujjwal Dwey				
25	Ujjwal Shivastava				
26	Vensha Prajapati				



Director
 Allenhouse Institute of Technology
 Rohini, Karapur-208008

PIEZO-ELECTRIC POWER GENERATOR

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

BACHELOR OF TECHNOLOGY

In
ELECTRONICS AND COMMUNICATION ENGINEERING
by

AKASH TIWARI (1850531001)
ANJALI BHARTI (1750531004)
MOHIT KUSHWAHA (1850531014)
SUYESH KUMAR (1850531022)

Under the supervision of

Dr. Rajeev Kumar Sachan
(Assistant Professor)
(Head of Department)



Department of Electronics and Communication Engineering
Allenhouse Institute of Technology, Kanpur
Dr. A.P.J. Abdul Kalam Technical University
Lucknow (UP)
May, 2022


Director
Allenhouse Institute of Technology
Roomba, Kanpur-208008



CERTIFICATE

This is to certify that Akash Tiwari (1850531001), Anjali Bharti (1750531004), Mohit Kushwaha (1850531014) and Suyesh Kumar (1850531022) has carried out the project work presented in this report entitled "PIEZO-ELECTRIC POWER GENERATOR" for the award of Bachelors of Technology degree in Electronics and Communication Engineering from Dr. A. P. J. Abdul Kalam Technical University, Lucknow under my supervision. The thesis embodies result of original work and studies are carried out by the students and the contents of the thesis do not form the basis for the award for any other degree to the candidate or to anybody else from this or any other University / Institution.

Mr. RAJEEV KUMAR SACHAN





(Project Guide)
(Head of Department)
(Electronics and Communication Engineering)

Director
Allenthouse Institute of Technology
Rooma, Kanpur-208008



UNDERTAKING

We declare that the work presented in this project entitled "PIEZO-ELECTRIC POWER GENERATOR" submitted to the Department of Electronics and Communication Engineering, Allenhouse Institute of Technology, Kanpur for the award of Bachelors of Technology degree in Electronics and Communication Engineering from Dr. A. P. J. Abdul Kalam Technical University, Lucknow. The contents of the thesis do not form the basis for the award for any other degree to the candidate or to anybody else from this or any other University / Institution. Further we have not or submitted the same work for the award of any other degree. In case this undertaking is found incorrect, we accept that our degree may unconditionally be withdrawn.

S.No.	Name	Univ. Roll No.	Signature
1	Akash Tiwari	1850531001	
2	Anjali Bharti	1750531004	
3	Mohit Kushwaha	1850531014	
4	Suyesh Kumar	1850531022	


Director
Allenhouse Institute of Technology
Roosma, Kanpur-208008

Date: May 28/5/ 2022
Allenhouse Institute of Technology, Kanpur



ACKNOWLEDGEMENT

We are overwhelmed in all humbleness and gratefulness to acknowledge our depth to all those who have helped us to put these ideas, well above the level of simplicity and into something concrete.

We would like to express our special thanks of gratitude to our mentor Mr. Rajeev Kumar Sachan who gave us the golden opportunity to do this wonderful project on the topic "**PIEZO-ELECTRIC POWER GENERATOR**", which also helped us in doing a lot of research and we came to know about so many new things. We are really thankful to them. Any attempt at any level can't be satisfactorily completed without the support and guidance of our parents and friends.

We would like to thank our parents who helped us a lot in gathering different information, collecting data and guiding us from time to time in making this project, despite of their busy schedules, they gave us different ideas in making this project unique.


Director
Allenhouse Institute of Technology
Roosha, Kanpur-208008



ABSTRACT

Piezoelectric materials can be used to convert oscillatory mechanical energy into electrical energy. This technology, together with innovative mechanical coupling designs, can form the basis for harvesting energy from mechanical motion. Piezoelectric energy can be harvested to convert walking motion from the human body into electrical power. Recently four proof-of-concept Heel Strike Units were developed where each unit is essentially a small electric generator that utilizes piezoelectric elements to convert mechanical motion into electrical power in the form factor of the heel of a boot.

The results of the testing and evaluation and the performance of this small electric generator are presented. The generator's conversion of mechanical motion into electrical power, the processes it goes through to produce useable power and commercial applications of the piezo electric generator are discussed.


Director
Allenhouse Institute of Technology
Roomba, Kanpur-208008



DUAL-AXIS SOLAR TRACKER

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

BACHELOR OF TECHNOLOGY

In
ELECTRONICS AND COMMUNICATION ENGINEERING
by

ANUPRASH GUPTA (1850531003)

APARNA SAHU (1850531005)

KOMAL GAUTAM (1850531011)

SHALINI (1905050319003)

Under the supervision of

Dr. Shivakant Pandey
(Assistant Professor)



Department of Electronics and Communication Engineering
Allenhouse Institute of Technology, Kanpur

Dr. A.P.J. Abdul Kalam Technical University

Lucknow (UP)

May, 2022


Director
Allenhouse Institute of Technology
Roama, Kanpur-208008



CERTIFICATE

This is to certify that Anupam Gupta (1850531003), Aparna Sahu (1850531005), Komal Gautam (1850531011) and Shalini (1905050319003) has carried out the project work presented in this report entitled "DUAL-AXIS SOLAR TRACKER" for the award of **Bachelors of Technology** degree in **Electronics and Communication Engineering** from **Dr. A. P. J. Abdul Kalam Technical University, Lucknow** under my supervision. The thesis embodies result of original work and studies are carried out by the students and the contents of the thesis do not form the basis for the award for any other degree to the candidate or to anybody else from this or any other University / Institution.



Mr. SHIVAKANT PANDEY

(Project Guide)
(Assistant Professor)
(Electronics and Communication Engineering)

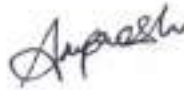


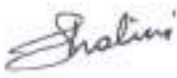


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UNDERTAKING

We declare that the work presented in this project entitled "DUAL-AXIS SOLAR TRACKER" submitted to the Department of Electronics and Communication Engineering, Allenhouse Institute of Technology, Kanpur for the award of Bachelors of Technology degree in Electronics and Communication Engineering from Dr. A. P. J. Abdul Kalam Technical University, Lucknow. The contents of the thesis do not form the basis for the award for any other degree to the candidate or to anybody else from this or any other University / Institution. Further we have not or submitted the same work for the award of any other degree. In case this undertaking is found incorrect, we accept that our degree may unconditionally be withdrawn.

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3.	Komal Gautam	1850531011	
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ABSTRACT

The goal of this thesis was to develop a laboratory prototype of a solar tracking system, which is able to enhance the performance of the photovoltaic modules in solar energy systems. The operating principle of the device is to keep the photovoltaic modules constantly aligned with the sunbeams, which maximizes the exposure of the solar panel to the Sun's radiation. As a result, more output power can be produced by the solar panel. The work of the project included hardware design and implementation, together with software programming for the microcontroller unit of the solar tracker. The system utilized an ATmega328P microcontroller to control motion of two DC motors, which rotate the solar panel in two axes. The amount of rotation was determined by the microcontroller, based on inputs retrieved from four photo sensors located next to the solar panel. At the end of the project, a functional solar tracking system was designed and implemented. It was able to keep the solar panel aligned with the sun, or any light source repetitively. Design of the solar tracker from this project is also a reference and a starting point for the development of more advanced systems in the future.


Director
Allenhouse Institute of Technology
Roosha, Kanpur-208008



OBSTACLE AVOIDING CAR

A Project Report Submitted
in Partial Fulfillment of the Requirements

For the Degree of

BACHELOR OF TECHNOLOGY

in

ELECTRONICS AND COMMUNICATIONS ENGINEERING

by

ASHMAL AIJAZ (1850531006)

KOMAL SINGH (1850531012)

SHAIENDRA PRATAP SINGH (1750531025)

VAISHNAVI MISHRA (1850531023)

Under the supervision of

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Mr. Mahendra Singh Dev

Mr. MAHENDRA SINGH DEV

(PROJECT GUIDE)

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Mr. RAJEEV KUMAR SACHAN

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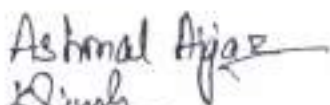
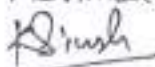
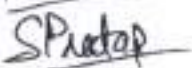
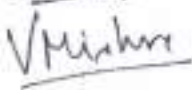
UNDERTAKING

We declare that the work presented in this project entitled "OBSTACLE AVOIDING CAR"

submitted to the Department of Electronics and Communication Engineering, **Allenhouse Institute of Technology**, Kanpur, for the award of the **Bachelor of Technology** degree in **Electronics and Communication Engineering**, for **Dr. A. P. J. Abdul Kalam Technical University, Lucknow**. The content 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.

Further we have not or submitted the same work for the award of any other degree. In case this

undertaking is found incorrect we accept that our degree may unconditionally be withdrawn.

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2	Komal Singh	1850531012	
3	Shailendra Pratap Singh	1750531025	
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Date: May2022

Allenhouse Institute of
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ACKNOWLEDGEMENT

We wish to take this opportunity to express our gratitude and supervision **Mr. MAHENDRA SINGH DEV** in conceptualizing this report. We are expressing our sincere thanks to **Mr. RAJEEV KUMAR SACHAN** Head of Department of Electronics and Communication Engineering Allenhouse Institute of Technology, Kanpur for providing us the necessary facilities in the department and for his valuable guidance. We also want to thanks to all the staff members of the department who helped us directly or indirectly in completing this work. We also want to thank our college for supporting us in our project by providing us space, time and money to fabricate our project. Working on the topic "**OBSTACLE AVOIDING CAR**" has been a wonderful experience for us.

ASHMAL AJAZ

KOMAL SINGH

SHAILENDRA PRATAP SINGH

VAISHNAVI MISHRA


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Kanpur, Kanpur-208003



ABSTRACT

In today's world robotics is a fast growing and interesting field. The robot has sufficient intelligence to cover the maximum area of provided space. Obstacle avoidance is one of the most critical factors in the design of autonomous vehicles such as mobile robots. Obstacle avoidance may be divided into two parts, obstacle detection and avoidance control. Numerous methods for obstacle avoidance have been suggested and research in this area of robotics is done extensively.

It has a sensor which is used to sense the obstacles coming in between the path of robot. It will move in a particular direction and avoid the obstacle which is coming in its path. Obstacle Avoiding Robots are robots that can perform desired tasks in unstructured environments without continuous human guidance. It is found that the motors are sufficient to produce the basic walking robot and one voltage regulators are needed to control the load where it is capable of supplying enough current to drive the motor for each wheel.

The aim of this project is to develop an avoidance behaviours program for a robot that consists of an ultrasonic sensor and motors that been employed at the legs. An Arduino Uno Controller has been implemented to act as a brain for the robot that controls the walking and turning algorithm. Ultrasonic sensor was also developed to act as an "eye to the system and tells the brain about existence of obstacle in front. As a resultant, the obstacle avoidance legged robot system is been successfully developed that allows and will navigate the robot to move through the environment freely.


Director
Allenthouse Institute of Technology
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Allenhouse Institute of Technology

Details of Projects_Major_Minor_Mini
Academic Session_2021-22

S. No.	Name of Program	Name of Project	Impact of the Project (on Industry/Social/Environment, etc.)	Name of Supervisor	No. of Students associated	Name and Roll No. of Students
1	B.TECH_ME	Fabrication of electric vehicle	Utilisation of automotive waste for producing E-vehicle	Mr. Ashwini Agnihotri	4	1. RISHABH TIWARI 2. RISHI KUMAR KATIYAR, 1850540004 3. SAURABH KUMAR, 1850540011 4. ANIRUDH VISHAYVA, 1850540007
2	B.TECH_ME	Design and Fabrication on Electric Tiller Machine	Use of renewable energy in farming	Mr. Gaurav Kumar Pandey	7	1. AMIR KHAN, 1850540008 2. SYED ANAS AHMAD, 1850540044 3. SYED HANZALA NASEER, 1850540015 4. MOHD FARZAN, 1850540025 5. MOHD NADEEM RAZA, 1850540024 6. S. M. SADEQUEEN, 1850540008 7. ABHISHEK, 1850540001
3	B.TECH_ME	Arduino based rover	Use of automation	Mr. Saurabh Kumar	6	1. ANKOL SHASTRI, 1850540009 2. MD SOHEL, 1850540023 3. TABRIEZ ALI, 1850540016 4. SACHIN KR VADAV, 1850540037 5. VARUN THAKUR, 1850540047 6. MOHD ZEESHAN, 1850540026
4	B.TECH_ME	Studies on mechanical properties of glass fiber and carbon fiber with resin composition	Light weight materials	Mr. Ashwini Agnihotri	5	1. AMAN KUMAR, 1850540005 2. ARSHAD ALI, 1850540013 3. AWANISH KUMAR, 1850540014 4. DEWANSHI MISHRA, 1850540015 5. CHEERAJ KUMAR, 1850540016
5	B.TECH_ME	Design and Fabrication on 3-D Printer	Additive manufacturing	Mr. Ashish Katiyar	5	1. SHIVA VERMA, 1850540042 2. RAJU KUMAR, 1850540031 3. ANUP VADAV, 1850540012 4. ABHISHEK KR GAUTAM, 1850540002 5. DIVYJAY PAL, 1850540017
6	B.TECH_ME	Fabrication and mechanical properties evaluation of 3-D printed objects	Light weight materials/ Additive Manufacturing	Mr. Ashish Sharma	7	1. RISHABH VISHWAKARMA, 1850540003 2. ZAMAN SIDDIQUE, 1850540049 3. JIGAR PATHAK, 1850540020 4. MANSHU KANWJIA, 1850540022 5. AKASH KUMAR, 1850540012 6. SAURABH SINGH, 1850540012 7. ANU SHUKLA, 1850540011
7	B.TECH_ME	Fabrication of star climbing wheel ch	For providing support to special challenged persons	Mr. Vikramshu uttam	5	1. ANKIL ESH KUMAR, 1850540004 2. MANISH YADAV, 1850540021 3. RISHISH KUMAR, 1850540035 4. SALMAN SUHAIL, 1850540038 5. VIRENDRA GAUTAM, 185054001

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Allenhouse Institute of Technology
Roorna, Kanpur-208008



CERTIFICATE

This is certify that the project entitled " Fabrication of Electric Vehicle " is being submitted by saurabh kumar(1850540041), Rishi ku. Katiyar(1850540034), Priyanka sachan(1850540029), Anirudh vaishya(1850540007), Rishabh tiwari(1850540032) in partial fulfillment of the requirements for the B. Tech degree in Mechanical Engineering of Allenhouse Institute of Technology , Kanpur Affiliated to Dr. APJ Abdul Kalam Technical University , Lucknow is a record of their own work , carried out under my supervision .

Supervisor

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Mr. Abhishek nigam

Assistant Professor

Mechanical Engineering Department

Allenhouse Institute of Technology ,

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Countersigned by :

Mr. saurabh Mishra

Head - Department of Mechanical Engineering Allenhouse Institute of Technology , Kanpur Dr. A.P.J,Abdul Kalam Technical University , Uttar Pradesh , Lucknow.

Date

A. Nigam
31/05/22

31/05/2022

Ashwani
31/05/22

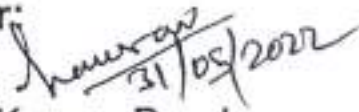


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This is to clarify that MOHD.FARZAN (1850540025), SYED ANAS AHMAD (1850540044), SYED HANZALA NASEER (1850540045), S.M. SADEQEEEN (1850540036), MOHD. NADEEM RAZA (1850540024), ABHISHEK MODANWAL (1850540001), AMIR KHAN (1850540006) has carried out the project work presented in this report and titled "DESIGN & FABRICATION OF ELECTRIC TILLER MACHINE", for the award of Bachelor of Technology degree in Mechanical Engineering from Dr. Abdul Kalam Technical University, Lucknow under our supervision. The thesis embodies result of original work and studies are carried out by the student and content of the thesis do not for the basis for award or any other degree to the candidate or to anybody else from this for any other University/Institute.

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31/05/2022
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Assistant Professor

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Countersigned by:


31/05/2022
Mr. SAURABH KUMAR MISHRA

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Allenhouse Institute of Technology
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Date: 31/05/2022

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This is to certify that **TABREZ ALI (1850540046)**, **MOHD ZEESHAN (1850540026)**, **SACHIN KUMAR YADAV (1850540037)**, **ANMOL SHASTRI (1850540009)**, **VARUN THAKUR (1850540047)**, **MO. SOHEL (1850540023)** has carried out the project work presented in this report and titled "**ARDUINO BASED ROVER**", for the award of **Bachelor of Technology degree in Mechanical Engineering** from **Abdul Kalam Technical University, Lucknow** under our supervision. The thesis embodies result of original work and studies are carried out by the student and the contents of the thesis do not form the basis for award of any other degree to the candidate or to anybody else from this for any other university/ Institution.


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Mr. SAURABH KUMAR MISHRA
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Department of Mechanical Engineering
Allenhurst Institute of Technology
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Allenhurst Institute of Technology
Rooma, Kanpur-208008

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This is Certified that the project work entitled "STUDIES ON MECHANICAL PROPERTIES OF GLASS FIBER AND CARBON FIBER WITH RESIN COMPOSITION" carried out by Mr. DEVARSHI MISHRA (1850540015), Mr. AMAN KUMAR (1850540005), Mr. ARSHAD ALI (1850540013), Mr. AVANISH KUMAR (1850540014), Mr. DHEERAJ KUMAR (1850540016) bonafide students of Allenhouse Institute of Technology, an autonomous institution under Dr. A.P.J. Abdul Kalam Technical University, Lucknow in partial fulfilment for the award of Bachelor of Technology in Mechanical Engineering during the academic year 2021-2022. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the phase I Project Report deposited in the departmental library. The project work has been approved, as it satisfies the academic requirement in respect of project work prescribed for the said degree.



Ashwani
1/06/2022

Sdr
Director
Allenhouse Institute of Technology
Rooma, Kanpur-208008

CERTIFICATE

This is to certify that RAJU KUMAR (1850540031), SHIVA VERMA (1850540042), DIGVIJAY PAL (1850540017), AMAN YADAV (19005050409001), ABHISHEK KUMAR GAUTAM (1850540002), has carried out the project work presented in this report entitled "DESIGN AND FABRICATION OF 3D PRINTER" for the award of Bachelor of Technology Degree in Mechanical Engineering from Dr. A.P.J ABDUL KALAM TECHNICAL UNIVERSITY, LUCKNOW under our supervision. The thesis embodies result of original work and studies are carried out by the students and the contents of the thesis 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.


Mr. ASHISH KUMAR KATIYAR

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Date:..31.12.2022




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This is to certify that RISHABH VISHWAKARMA(1850540033), AKASH KUMAR (1905050408001), MANSHU KANOJIYA (1850540022), ZAMAN SIDDIQUI(1850540049), ANUJ SHUKLA (1850540011), SAURABH SINGH (1905050408002), JIGAR PATHAK (1850540020) has carried out the project work presented in this report entitled "FABRICATION AND MECHANICAL PROPERTIES EVALUATION OF 3D PRINTED OBJECTS" for the award of Bachelor of Technology Degree in Mechanical Engineering from Dr.A.P.J ABDUL KALAM TECHNICAL UNIVERSITY, LUCKNOW under our supervision. The thesis embodies result of original work and studies are carried out by the students and the contents of the thesis 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.




Mr. AVINASH SHARMA

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This is Certified that the project work entitled "FABRICATION OF STAIR CLIMBING WHEEL CHAIR" carried out by Mr. SALMAN SUHAIL (1850540038), Mr. MANISH YADAV (1850540021), Mr. AKHILESH KUMAR (1850540004), Mr. RISHISH KUMAR (1850540036), Mr. VIRENDRA GAUTAM (1850540048) are Bonafede students of Allen House Institute of Technology, an autonomous institution under Dr. A.P.J. Abdul Kalam Technical University, Lucknow in partial fulfilment for the award of Bachelor of Technology in Mechanical Engineering during the academic year 2021-2022. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the phase I Project Report deposited in the departmental library. The project work has been approved, as it satisfies the academic requirement in respect of project work prescribed for the said degree.



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Date... 31/05/22



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