



# BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Affiliated to JNTUH, Approved by AICTE, and Accredited by NAAC & NBA)  
Ibrahimpattanam - 501510, Hyderabad, Telangana

## CERTIFICATE

This is to certify that the Major project work entitled "**EXPERIMENTAL STUDY OF FIBER REINFORCEMENT CONCRETE**" is beneficial and carried by

S RAVIKUMAR GOUD

18E11A0167

in the department of Civil Engineering, **BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**, Ibrahimpattanam, is submitted to **Jawaharlal Nehru Technological University, Hyderabad** in partial fulfilment of the requirements for the award of B.Tech Degree in Civil Engineering during 2021-2022.

**Guide:**

M.NASEEM AHMED

Assistant Professor

Dept of Civil Engineering

**Head of the Department:**

Dr.K.VENU GOPAL

Associate professor

Dept of Civil Engineering

Viva-voice held on 09/07/22 .....

  
Internal Examiner

  
External Examiner



## DEPARTMENT OF CIVIL ENGINEERING

### BIHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Affiliated to JNTU Hyderabad, approved by AICTE, accredited by NAAC 'A' Grade)  
Brahmapuram - 501510, Hyderabad, Telangana

### DECLARATION

We are here by declare that this Major project in titled "SELF COMPACTING CONCRETE USING M-SAND AND CINDER AGGREGATES" is a genuine work carried out by us in B.Tech (civilengineering) degree course of **Jawaharlan Nehru Technological University, Hyderabad** and has not been submitted to any other courses or university for the award of degree by

ROLL NO	NAME OF THE STUDENT	SIGNATURE
19E15A0120	G.MOUNIKA	<i>G.Mounika</i>
19E15A0122	R.SANDHYA	<i>R.Sandhya</i>
19E15A0129	D.GOWTHAM RAJU	<i>D. Gowtham Raju</i>
19E15A0130	A.TARUN KUMAR GOUD	<i>A.Tarun Kumar Goud</i>



**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY** (Affiliated to JNTUH Hyderabad, Approved by AICTE, accredited by NAAC&NBA Accredited)

Ibrahimpatnam-501510, Hyderabad, Telangana.

**CERTIFICATE**

This to certify that the Mini Project work entitled "**LABORATORY STUDY ON USING POLYMER CONCRETE IN CONSTRUCTON**" is a benefited project work carried out

NAME	BY	ROLL NO
N.VINAY		18E11A0160
M.MANOJ REDY		18E11A0158
K.SIVA		18E11A0154
K.PRASHANTH		18E11A0153

In the Department of Civil Engineering, **BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**, Ibrahimpatnam is submitted to **Jawaharlal Nehru Technological University, Hyderabad** in partial fulfillment of the requirements for the award of **B. Tech degree in Civil Engineering** during **2021-2022**.

Guide:

**Dr.K.VENU GOPAL**

Assistant Professor

Dept. of Civil

Bharat institute of Engineering and Technology  
Ibrahimpatnam-501510, Hyderabad

Head of the Department:

**Dr. K. VENU GOPAL**

Assistant Professor

Dept.of Civil

Bharat institute of Engineering Technology  
Ibrahimpatnam-501510, Hyderabad

Viva-Voice held on... 09/07/22 .....

**Internal Examiner**

**External Examiner**



## BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Affiliated to JNTUH, Approved by AICTE and Accredited by NAAC & NBA)  
Ibrahimpattam-501510, Hyderabad, Telangana

### CERTIFICATE

This is to certify that the Major project work entitled "STUDY ON BEHAVIOUR OF M25 CONCRETE USING BAMBOO FIBRES" is beneficial and carried

#### By

CH RAVITEJA	19E15A0105
B SHIVA KUMAR	19E15A0110
K VAMSHI	18E11A0113
K VISHWAJITH	18E11A0116

In the department of Civil Engineering, **BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**, Ibrahimpattam, is submitted to **Jawaharlal Nehru Technological University, Hyderabad**. In partial fulfillment of the requirements for the award of B. Tech Degree in Civil Engineering during 2021-2022.

**Guide:**

*P.V.R. Narendra Babu*  
*08/07/2022*  
Dr. Venkata Rama Narendra Babu Perumalla  
Assistant Professor  
**Dept of CIVIL**  
Bharat Institute of Engineering and Technology  
Ibrahimpattam 501510, Hyderabad

**Head of the Department:**

*K. Venu Gopal*  
Dr. K. Venu Gopal  
Associate Professor  
**Dept of CIVIL**  
Bharat Institute of Engineering and  
Technology,  
Ibrahimpattam-501510, Hyderabad

**Principal:**

Bharat Institute of Engineering and Technology

Viva-voice held on *08/07/2022*.....

*N. Venkata Rama*  
Internal Examiner  
*08/07/2022*

*G. Anusha*  
External Examiner  
*8/7/22*  
AVN/ET.



## BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Affiliated to JNTU Hyderabad, approved by AICTE, accredited by NAAC & MBA)  
Ibrahimpatnam – 501510, Hyderabad, Telangana

### CERTIFICATE

This is to certify that the major project report work entitled “**PARTIAL REPLACEMENT OF CEMENT BY USING RICE HUSK ASH**” is beneficial and carried

By

NAME	ROLL NO
N.VISHAL	18E11A0162
V.PAVAN KALYAN	18E11A0172
G.RAMYA	19E15A0119
A.BHARGAVI	19E15A0121

in the Department of Civil Engineering, **BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**, Ibrahimpatnam is submitted to **Jawaharlal Nehru Technological University, Hyderabad** in partial fulfillment of the requirements for the award of a degree in civil engineering during 2018-2022.



**Guide:**

**Y. APPALA NAIDU**

**Assistant Professor**

**Dept of Civil Engineering**

**Bharat Institute Of Engineering And Technology**

**Ibrahimpatnam – 501510,Hyderabad.**



**Head of the Department**

**DR.K.VENU GOPAL**

**Assistant Professor**

Viva Voice held on.....**09/07/22**.....



**Internal Examiner**



**External Examiner**



## BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Affiliated to JNTUH Hyderabad, Approved by AICTE, Accredited by NAAC&NBA Accredited

UG Programs: EEE, ECE, ME&CSE)

Ibrahimpattanam-501510, Hyderabad, Telangana.

### CERTIFICATE

This to certify that the Mini Project work entitled "**IoT BASED CONTROL OF HOME AUTOMATION IN REAL TIME APPLIANCES**" is a benefited project work carried out

By

D. Kavya	18E11A0214
A. Samanvitha	18E11A0204
M. Sai Krishna	17E11A0221
K. Vignesh	17E11A0245

in the Department of Electrical and Electronics Engineering, **BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**, Ibrahimpattanam is submitted to **Jawaharlal Nehru Technological University, Hyderabad** in partial fulfillment of the requirements for the award of **B. Tech degree in Electrical and Electronics Engineering** during **2018-2022**.

Guide:

**Mr.K. SRINIVASA RAO, M.E., (Ph.D)**

**Assistant Professor,**

**Dept of EEE**

Bharat Institute of Engineering and Technology,  
Ibrahimpattanam-501510, Hyderabad.

Head of the Department:

**Dept of EEE**

Bharat Institute of Engineering and Technology,  
Ibrahimpattanam-501510, Hyderabad.

Principal:

**Dr.G.MUNI REDDY**

Bharat Institute of Engineering and Technology

Viva-Voice held on.....10.06.2022.....

Internal Examiner

External Examiner



# BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Affiliated to JNTUH Hyderabad, Approved by AICTE, Accredited by NAAC&NBA Accredited

UG Programs: EEE, ECE, ME&CSE)

Ibrahimpattanam-501510, Hyderabad, Telangana.

## CERTIFICATE

This to certify that the Project work entitled "**PARTIAL SHADING DETECTION OF PHOTOVOLTAIC MODULES**" is a benefited project work carried out

By

S. MADHUSUDHAN REDDY	19E15A0201
K. ANJALI	18E11A0222
P. UDAY REDDY	16E11A0237
B. SRINIVAS REDDY	18E11A0210
K. CHETAN	19E15A0206

in the Department of Electrical and Electronics Engineering, BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY, Ibrahimpattanam is submitted to Jawaharlal Nehru Technological University, Hyderabad in partial fulfillment of the requirements for the award of B. Tech degree in Electrical and Electronics Engineering during 2018-2022.

Guide:

  
30/6/22

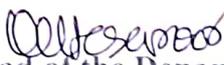
Mr. S. CHAITANYA

Assistant Professor, M.Tech,

Dept of EEE

Bharat institute of Engineering and Technology,

Ibrahimpattanam-501510, Hyderabad.

  
Head of the Department:

Dept of EEE

Bharat institute of Engineering and Technology,

Ibrahimpattanam-501510, Hyderabad.

Principal:

Dr. G. MUNI REDDY

Bharat Institute of Engineering and Technology

Viva-Voice held on..... 21/06/22 .....

  
Internal Examiner

  
External Examiner



## BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

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UG Programs: EEE, ECE, ME&CSE)

Ibrahimpatnam-501510, Hyderabad, Telangana.

### CERTIFICATE

This to certify that the Project work entitled **“COOLING AND CLEANING TECHNOLOGY OF SOLAR PANEL”** is a benefited project work carried out

By

<b>B. Anusha</b>	<b>19E15A0202</b>
<b>A. Sai Chandra</b>	<b>19E15A0209</b>
<b>D. Chandrakanth</b>	<b>19E15A0207</b>
<b>B. Pravalika</b>	<b>18E11A0209</b>
<b>Ch. Swetha</b>	<b>18E11A0213</b>

in the Department of Electrical and Electronics Engineering, BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY, Ibrahimpatnam is submitted to Jawaharlal Nehru Technological University, Hyderabad in partial fulfillment of the requirements for the award of B. Tech degree in Electrical and Electronics Engineering during 2018-2022.

  
Guide:

**Dr. SUKANTH. T**

**Assistant Professor**

Dept of EEE

Bharat institute of Engineering and Technology,

Ibrahimpatnam-501510, Hyderabad.

  
Head of the Department:

Dept of EEE

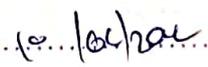
Bharat institute of Engineering and Technology,

Ibrahimpatnam-501510, Hyderabad.

**Principal:**

**Dr. G. MUNI REDDY**

Bharat Institute of Engineering and Technology

Viva-Voice held on.....

  
Internal Examiner

  
External Examiner



## BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

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UG Programs: EEE, ECE, ME&CSE)

Ibrahimpattanam-501510, Hyderabad, Telangana.

### CERTIFICATE

This to certify that the Project work entitled **“BATTERY LESS SOLAR ENERGY STORAGE SYSTEM”** is a benefited project work carried out

By

E. SRIRAM	19E15A0218
A. VISHNU VARDHAN REDDY	18E11A0201
B. PRAVALIKA REDDY	18E11A0208
G. RAJESH	18E11A0219

in the Department of Electrical and Electronics Engineering, BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY, Ibrahimpattanam is submitted to Jawaharlal Nehru Technological University, Hyderabad in partial fulfillment of the requirements for the award of B. Tech degree in Electrical and Electronics Engineering during 2018-2022.

Guide:

Dr. SUKANTH. T

Assistant Professor

Dept of EEE

Bharat institute of Engineering and Technology,

Ibrahimpattanam-501510, Hyderabad.

Head of the Department:

Dept of EEE

Bharat institute of Engineering and Technology,

Ibrahimpattanam-501510, Hyderabad.

Principal:

Dr. G. MUNI REDDY

Bharat Institute of Engineering and Technology

Viva-Voice held on.....*12.06.2020*.....

Internal Examiner

External Examiner



## BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Affiliated to JNTUH Hyderabad, approved by AICTE, accredited by NAAC&NBA)

Accredited UG Programs: EEE, ECE, ME&CSE)

Ibrahimpattam-501510, Hyderabad, Telangana.

### CERTIFICATE

This is to certify that the Major Project work entitled "MAXIMUM POWER POINT TRACKING FOR SOLAR PV MODULE USING INCREMENTAL CONDUCTANCE ALGORITHM" is beneficial and carried

NAME	By	ROLL NO
M.DEEPTHI		18E11A0226
R.AJAY		18E11A0235
M.SRUJAN		18E15A0227
P.ARAVIND		18E15A0228
MOHD ABDUL HAFEEZ AHMED		16E11A0284

in the Department of Electrical and Electronics Engineering, **BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**, Ibrahimpattam is submitted to **Jawaharlal Nehru Technological University, Hyderabad** in partial fulfillment of the requirements for the award of a B.Tech degree in Electrical and Electronics Engineering during **2021-2022**.

Guide:



V.SAMPATH KUMAR

Assistant Professor

Dept of EEE

Bharat Institute of Engineering and Technology  
Ibrahimpattam-501510, Hyderabad

Head of the Department



Dept of EEE

Bharat Institute of Engineering and Technology  
Ibrahimpattam-501510, Hyderabad

Principal:

Dr.G.MUNI REDDY

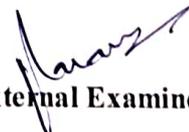
Bharat Institute of Engineering and Technology

Viva-Voice held on.....

Internal Examiner



External Examiner



# BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Affiliated to JNTU Hyderabad, Approved by AICTE,)  
Mangalpally, Ibrahimpatnam-501510, R.R. Dist, TS



## CERTIFICATE

This is to certify that the mini project report entitled "Fabrication of hybrid power generation by solar and vertical axis wind turbine" is being submitted by S. AKHILESH (18E11A0323), V DINESH KUMAR (18E11A0326), D BALAJI (19E15A0303), C RAMESH, (19E15A0313) respectively in partial Fulfilment for the award of degree of Bachelor of technology In Mechanical Engineering From Bharat Institute of Engineering and Technology, Hyderabad and us a bonafide work carried out by them under the guidance of Dr. SUNEEV KUMAR BANSAL, Associate professor and Dr. PRAVEEN KUMAR RAI, Assistant professor, Department Of Mechanical Engineering, BIET Hyderabad. This result embodied in this report has not Been submitted to any other Institute of university for the award of any other Degree.

### INTERNAL GUIDE

(Dr. SUNEEV KUMAR BANSAL)

(Dr. Praveen Kumar Rai)

### EXTERNAL EXAMINER

Dr. Suresh Arjula

Assistant Professor (Mech. Engg.)

JNTUH university College of Engineering

Jagtial

ACADAMIC /C

( Dr. M. SHRIDHAR)

PRINCIPAL

**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

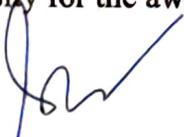
(Approved by AICTE, Affiliated to JNTU Hyderabad)

Mangalpally, Ibrahimpatanam-501510, R.R.Dist, T.S



## **CERTIFICATE**

This is to certify that the Mini project report entitled “METAL MATRIX COMPOSITE Al/SiC” is being submitted by BOMMA SRIKANH(18E11A0304), DAYYALA LAKSHMAN (18E11A0305), KELOTH VIJAY KUMAR (18E11A0310), PURAMSHETTY JWANITH (18E11A0319) respectively in partial fulfillment for the award of degree of Bachelor of technology in Mechanical Engineering from Bharat Institute of Engineering and Technology, Hyderabad and is a bonafide work carried out by them under the guidance of Dr. Suneev Anil Bansal, Associate Professor, Department of Mechanical Engineering, BIET Hyderabad. This result embodied in this report has not been submitted to any other Institute of university for the award of any other Degree.

  
SUNEEV ANIL BANSAL  
(Internal Guide)

  
Dr. M. SHRIDHAR  
(Academic I/C)

  
EXTERNAL EXAMINER

  
PRINCIPAL

# BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, Affiliated to JNTU Hyderabad)

Mangalpally, Ibrahimpatanam-501510, R.R. Dist, T.S



## CERTIFICATE

This is to certify that the major project report entitled "**Steering Controlled Head Lights**" is being submitted by P. Manoj Reddy (17E11A0315), CH. Sowsheel Reddy(17E11A0323), E. Jeevan(17E11A0336) R. Sanjay (17E11A0355) respectively in partial fulfilment for the award of degree of Bachelor of technology In Mechanical Engineering from Bharat Institute of Engineering and Technology, Hyderabad and us a bonafide work carried out by them under the guidance of Dr. sunvee Anil Bansal, Department of Mechanical Engineering, BIET Hyderabad. This result embodied in this report has not been submitted to any other Institute of university for the award of any other Degree.

Dr. SUNVEE ANIL BANSAL

(Internal Guide) (Sunvee Anil Bansal)

Dr. M. SHRIDHAR

(Academic I/C)

EXTERNAL EXAMINER

Dr. Suresh Arjula  
Assistant Professor (Mech. Engg.)  
JNTUH University college of Engg.  
Jagitial

PRINCIPAL

PRINCIPAL

SHARAT INSTITUTE OF ENGG & TEC:  
MANGALPALLY, IBRAHIMPATANAM,  
R.R. DIST. TELANGANA-501510

# **BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

(Approved by AICTE, Affiliated to JNTU Hyderabad)

Mangalpally, Ibrahimpatanam-501510, R.R.Dist, T.S



## **CERTIFICATE**

This is to certify that the major project report entitled "Garbage Robot via bluetooth control" is being submitted by SHIVA KANDUKURI (18E11A0313), J.UDAY(18E11A0307), G. SREEKAR (17E11A0373) & D.TARUN (17E11A0358) respectively in partial fulfillment for the award of degree of Bachelor of technology in Mechanical Engineering from Bharat Institute of Engineering and Technology, Hyderabad and as a bonafide work carried out by them under the guidance of Mr. P.M.G BASHIR, Asst. Professor, Department of Mechanical Engineering, BIET Hyderabad. This result embodied in this report has not been submitted to any other Institute of university for the award of any other Degree.

Dr. ~~Mr.~~ P.M.G BASHIR  
(Internal Guide)

Dr. RAJASHEKARAN  
(Academic I/C)

EXTERNAL EXAMINER

PRINCIPAL

# BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, Affiliated to JNTU Hyderabad)

Mangalpally, Ibrahimpatanam-501510, R.R.Dist, T.S



## CERTIFICATE

This is to certify that the major project report entitled "Fully Automated Solar Grass Cutter" is being submitted by K.SURESH (18E11A0312), P.VINOD (18E11A0318), V.VARUN (18E11A0325) & B.BRAHUL GOUD (19E15A0312), respectively in partial fulfillment for the award of the degree of Bachelor of Technology in Mechanical Engineering from Bharat Institute of Engineering and Technology, Hyderabad and is a bonafide work carried out by them under the guidance of Dr.P.M.G.BASHIR ASDAQUE Asst. Professor, Department of Mechanical Engineering, BIET Hyderabad. This result embodied in this report has not been submitted to any other Institute or university for the award of any other Degree.

Dr.P.M.G.BASHIR ASDAQUE  
(Internal Guide)

Dr. M. SHRIDHAR  
(Academic I/C)

EXTERNAL EXAMINER

PRINCIPAL

# **BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

(Approved by AICTE, Affiliated to JNTU Hyderabad)

Mangalpally, Ibrahimpatanam-501510, R.R.Dist, T.S



## **CERTIFICATE**

This is to certify that the major project report entitled "Multipurpose Wheelchair" is being submitted by ADITYA KALAMNURIKAR (18E11A0301), B RAJESH (18E11A0303), N MADHU (18E11A0317) & M MANASA (19E15A0301), respectively in partial fulfillment for the award of the degree of Bachelor of Technology in Mechanical Engineering from Bharat Institute of Engineering and Technology, Hyderabad and is a bonafide work carried out by them under the guidance of Mr. Pradeep M Chavan, Asst. Professor, Department of Mechanical Engineering, BIET Hyderabad. This result embodied in this report has not been submitted to any other Institute or university for the award of any other Degree.

Mr. PRADEEP M. CHAVAN  
(Internal Guide)

Dr. M. SHRIDHAR  
(Academic I/C)

EXTERNAL EXAMINER

PRINCIPAL

# **BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

**(Approved by AICTE, Affiliated to JNTU Hyderabad)**

**Mangalpally, Ibrahimpatanam-501510, R.R.Dist, T.S**



## **CERTIFICATE**

This is to certify that the major project report entitled "BLIND SENSOR STICK" is being submitted by E.SRIKANTH REDDY (18E11A0306) , R.HRUTHIK NAIK (18E11A0321), JAYANTH KUMAR NAGAVELLY (19E15A0307), G.KHANNA (19E15A0308) respectively in partial fulfillment for the award of degree of Bachelor of technology In Mechanical Engineering from Bharat Institute of Engineering and Technology, Hyderabad and us a bonfire work carried out by them under the guidance of DR.PRAVEEN KUMAR RAI Assistant Professor, Department of Mechanical Engineering, BIET Hyderabad. This result embodied in this report has not been submitted to any other Institute of university fir the award of any other Degree.

**DR.PRAVEEN KUMAR RAI**

(Internal guide)

**Dr. M.SHRIDHAR**

(Academic I/C)

**EXTERNAL EXAMINER**

**PRINCIPAL**

# BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY

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Mangalpally, Ibrahimpatanam-501510, R.R.Dist, T.S



## CERTIFICATE

This is to certify that the major project report entitled "FLOATING SOLAR PANEL WITH SUN POSITION TRACKER" is being submitted by R. DIPEN KUMAR (19E15A0304), V. ESHWAR (19E15A0305), A. JAGADEESH REDDY(18E11A0302) & M. SAI CHARAN REDDY (18E11A0315) respectively in partial fulfilment for the award of degree of Bachelor of technology in Mechanical Engineering from Bharat Institute of Engineering and Technology, Hyderabad and us a bonafide work carried out by them under the guidance of Mr. Hemasundhar Banka, Asst. Professor, Department of Mechanical Engineering, BIET Hyderabad. This result embodied in this report has not been submitted to any other Institute of university for the award of any other Degree.

  
Mr. HEMASUNDHAR BANKA  
(Internal Guide)

  
Dr. M. SHRIDHAR  
(Academic I/C)

  
EXTERNAL EXAMINER

  
PRINCIPAL

# BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, Affiliated to JNTU Hyderabad)

Mangalpally, Ibrahimpatanam-501510, R.R. Dist, T.S



## CERTIFICATE

It is to certify that the major project report entitled "ECO-FRIENDLY DUST CLEANING MACHINE" is being submitted by T. Swathi (19E15A0302), V.Goutham (19E15A306), K. Adhu (19E15A309), J. Sai Kumar (19E15A0315) respectively in partial fulfilment for the award of degree of Bachelor of technology In Mechanical Engineering from Bharat Institute of Engineering and Technology, Hyderabad and was a bonafide work carried out by them under the guidance of Ms. T. Gayathri, Professor, Department of Mechanical Engineering, JNTU Hyderabad. This result embodied in this report has not been submitted to any other institute of university for the award of any other Degree.

  
MS. T. GAYATHRI

(Internal Guide)

  
Dr. M. SHRIDHAR

(Academic I/C)

  
EXTERNAL EXAMINER

  
PRINCIPAL

# **BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

(Approved by AICTE, Affiliated to JNTU Hyderabad)

Mangalpalli, Ibrahimpatanam-501510, R R Dist, T.S



## **CERTIFICATE**

This is to certify that the major project report entitled "Land surveying robot" is being submitted by A ROHIT (17E11A0337), M VENKATDAS (17E11A0359), K VENUPRASAD (18E11A0309) & SAI THARUN SINGH (19E15A0316) respectively in partial fulfillment for the award of degree of Bachelor of technology in Mechanical Engineering from Bharat Institute of Engineering and Technology, Hyderabad and us a bonafied work carried out by them under the guidance of DR. PRAVEEN KUMAR RAI, Assistant Professor, Department of Mechanical Engineering, BIET Hyderabad. This result embodied in this report has not been submitted to any other Institute of university for the award of any other Degree.

**DR. PRAVEEN KUMAR RAI**  
(Internal Guide)

**Dr. M.SRIDHAR**  
(Academic I/C)

**EXTERNAL EXAMINER**

  
**PRINCIPAL**

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Mangalpally, Ibrahimpatanam-501510, R.R.Dist, T.S



## **CERTIFICATE**

This is to certify that the major project report entitled "Multipurpose Wheelchair" is being submitted by ADITYA KALAMNURIKAR (18E11A0301), B RAJESH (18E11A0303), N MADHU (18E11A0317) & M MANASA (19E15A0301), respectively in partial fulfillment for the award of the degree of Bachelor of Technology in Mechanical Engineering from Bharat Institute of Engineering and Technology, Hyderabad and is a bonafide work carried out by them under the guidance of Mr. Pradeep M Chavan, Asst. Professor, Department of Mechanical Engineering, BIET Hyderabad. This result embodied in this report has not been submitted to any other Institute or university for the award of any other Degree.

Mr. PRADEEP M. CHAVAN  
(Internal Guide)

Dr. M. SHRIDHAR  
(Academic I/C)

EXTERNAL EXAMINER

PRINCIPAL

**DETECTION OF FAKE IMAGES USING MACHINE  
LEARNING**

Batch Codes: 18MP01C11

**A Major Project Report**

Submitted to

**Jawaharlal Nehru Technological University Hyderabad**

in Partial fulfillment of the Requirements  
for the Award of the Degree of

**Bachelor of Technology**

In

*Electronics & Communication Engineering*

Submitted by

M. ANOOP  
S. PRUDHVI  
A. RAHUL  
L. AKHIL REDDY

18E11A04A7  
18E11A04C0  
17E11A04B1  
19E15A0419

*Under the Supervision of*

**Dr. ANIL KUMAR SAHU**

Associate Prof. DEPT ECE



Department of Electronics & Communication Engineering

**BHARATIYA VIDYALAYA INSTITUTIONS OF ENGINEERING & TECHNOLOGY**

Mangalagiri, West Godavari District (M), Rangareddy - 501510

# **DETECTION OF FAKE IMAGES USING MACHINE LEARNING**

**Batch Code: 18MP01C11**

## **A Major Project Report**

Submitted to

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## **Bachelor of Technology**

*In*

*Electronics & Communication Engineering*

*Submitted by*

M. ANOOP

18E11A04A7

S. PRUDHVI

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19E15A0419

*Under the Supervision of*

**Dr. ANIL KUMAR SAHU**

Associate Prof, Dept ECE



Department of Electronics & Communication Engineering

# **DETECTION OF FAKE IMAGES USING MACHINE LEARNING**

Batch Code: 18MP01C11

**A Major Project Report**  
Submitted to  
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**Bachelor of Technology**  
*In*  
**Electronics & Communication Engineering**  
*Submitted by*

M. ANOOP	18E11A04A7
S. PRUDHVI	18E11A04C0
A. RAHUL	17E11A04B1
L. AKHIL REDDY	19E15A0419

*Under the Supervision of*

**Dr. ANIL KUMAR SAHU**

Associate Prof, Dept ECE



Department of Electronics & Communication Engineering  
**BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY**  
Mangalpally(v), Ibrahimpatnam (M), Rangareddy -501510



**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

(Affiliated to JNTUH Hyderabad, Approved by AICTE and Accredited by NBA)  
Ibrahimpattam - 501 510, Hyderabad

**Certificate**

*This is to certify that the project work entitled “**DETECTION OF FAKE IMAGES USING MACHINE LEARNING**” is the bonafide work done*

By

**M. ANOOP**  
**S. PRUDHVI**  
**A. RAHUL**  
**L. AKHIL REDDY**

**18E11A04A7**  
**18E11A04C0**  
**17E11A04B1**  
**19E15A0419**

in the Department of Electronics And Communication Engineering, **BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**, Ibrahimpattam is submitted to **Jawaharlal Nehru Technological University, Hyderabad** in partial fulfillment of the requirements for the award of **B.Tech Degree in Electronics And Communication Engineering** during **2021-2022**.

Guide:

**Dr. ANIL KUMAR SAHU**

Dept of ECE  
Bharat Institute of Engineering and Technology,  
Ibrahimpattam - 501 510, Hyderabad.

Head of the Department:

**Mr.D.Sankara Reddy**

Dept of ECE  
Bharat Institute of Engineering and Technology,  
Ibrahimpattam - 501 510, Hyderabad.

Viva-Voce held on.....**6/11/22**.....

Internal Examiner

External Examiner



**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

(Affiliated to JNTUH Hyderabad, Approved by AICTE and Accredited by NBA)

Ibrahimpattam - 501 510, Hyderabad

### DECLARATION

We hereby declare that this Major Project Report is titled **“DETECTION OF FAKE IMAGES USING MACHINE LEARNING”** is a genuine work carried out by us in **B.Tech (Electronics and Communication Engineering)** degree course of **Jawaharlal Nehru Technology University Hyderabad**, and has not been submitted to any other course or university for the award of the degree by us.

Name	Roll No.	Signature of the Student
M. Anoop	18E11A04A7	M. Anoop
S. Prudhvi	18E11A04C0	S. Prudhvi
A. Rahul	17E11A04B1	A. Rahul
L. Akhil Reddy	19E15A0419	L. Akhil Reddy.



**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

(Affiliated to JNTUH Hyderabad, Approved by AICTE and Accredited by NBA)  
Ibrahimpattam - 501 510, Hyderabad

**PROGRAM EDUCATIONAL OBJECTIVES (PEOs)**

***Program Educational Objective 1: (PEO1)***

Graduates will be able to synthesize mathematics, science, engineering fundamentals, laboratory and work-based experiences to formulate and solve engineering problems in Electronics and Communication engineering domains and shall have proficiency in Computer-based engineering and the use of computational tools design of electronics systems.

***Program Educational Objective 2: (PEO2)***

Graduates will succeed in entry-level engineering positions within the core Electronics and Communication Engineering, computational or manufacturing firms in regional, national, or international industries and with government agencies.

***Program Educational Objective 3: (PEO3)***

Graduates will succeed in the pursuit of advanced degrees in Engineering or other fields where a solid foundation in mathematics, basic science, and engineering fundamentals is required.

***Program Educational Objective 4: (PEO4)***

Graduates will be prepared to communicate and work effectively on team based engineering projects and will practice the ethics of their profession consistent with a sense of social responsibility.

***Program Educational Objective 5: (PEO5)***

Graduates will be prepared to undertake Research and Development works in the areas of Electronics and Communication field

PO1 :	<b>Engineering knowledge:</b> Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2 :	<b>Problem analysis:</b> Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3 :	<b>Design/development of solutions:</b> Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4 :	<b>Conduct investigations of complex problems:</b> Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5 :	<b>Modern tool usage:</b> Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO6 :	<b>The engineer and society:</b> Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7 :	<b>Environment and sustainability:</b> Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8 :	<b>Ethics:</b> Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9 :	<b>Individual and team work:</b> Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO1 0:	<b>Communication:</b> Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO1 1:	<b>Project management and finance:</b> Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO1 2:	<b>Life-long learning:</b> Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

(Affiliated to JNTUH Hyderabad, Approved by AICTE & Accredited by NAAC and NBA)

Ibrahimpatnam - 501 510, Hyderabad, Telangana.

**PROGRAM SPECIFIC OUTCOMES (PSOs)**

PSO1:	<b>Professional Skills:</b> An ability to understand the basic concepts in Electronics & Communication Engineering and to apply them to various areas, like Electronics, Communications, Signal processing, VLSI, Embedded systems etc., in the design and implementation of complex systems.
PSO2:	<b>Problem-Solving Skills:</b> An ability to solve complex Electronics and communication Engineering problems, using the latest hardware and software tools, along with analytical skills to arrive at cost effective and appropriate solutions.
PSO3:	<b>Successful Career and Entrepreneurship:</b> An understanding of social-awareness & environmental-wisdom along with ethical responsibility to have a successful career and to sustain passion and zeal for real-world applications using optimal resources as an Entrepreneur.



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

(Affiliated to JNTUH Hyderabad, Approved by AICTE and Accredited by NBA)  
Ibrahimpattam - 501 510, Hyderabad

**Vision of the Institution**

To achieve autonomous & university status and spread universal education by inculcating discipline, character and knowledge into the young minds and mold them into enlightened citizens.

**Mission of the Institution**

Our mission is to impart education, in a conducive ambience, as comprehensive as possible, with the support of all the modern technologies and make the students acquire the ability and passion to work wisely, creatively and effectively for the betterment of our society.

**Vision of ECE department**

The vision of the Department of Electronics and Communication Engineering is to effectively serve the educational needs of local and rural students within the core area of electronics and communication engineering and develop high quality engineers and responsible citizens.

**Mission of ECE department**

The mission of the Department of Electronics and Communication Engineering is to work closely with industry, research organizations to provide high quality education in both theoretical and practical applications of electronics and communication engineering.

# Channel Estimation algorithms For Coherent Detection of Turbo-Coded OFDM Signals

Batch Code: CB/1P01D10

**Major Project Stage-I Report**

Submitted to

Jawaharlal Nehru Technological University Hyderabad

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

**Bachelor of Technology**

*In*

*Electronics & Communication Engineering*

*Submitted by*

K.Naveen

(18E11A04E4)

N.Srikanth

(18E11A04E9)

P.Sai Nikhil

(18E11A04F0)

P.Santhosh

(18E11A04F4)

*Under the Supervision of*

Dr. Fozzan Ahmad



Department of Electronics & Communication Engineering  
BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY  
Mangalpally, D. Prabhampally, Ranga Reddy -501510

# Channel Estimation algorithms For Coherent Detection of Turbo-Coded OFDM Signals

Batch Code:18MP01D10

**Major Project Stage-I Report**

Submitted to

Jawaharlal Nehru Technological University Hyderabad

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

**Bachelor of Technology**

*In*

*Electronics & Communication Engineering*

*Submitted by*

K.Naveen  
N.Srikanth  
P.Sai Nikhil  
P.Santhosh

(18E11A04E4)  
(18E11A04E9)  
(18E11A04F0)  
(18E11A04F4)

*Under the Supervision of*

**Dr.Faizan Ahmad**



Department of Electronics & Communication Engineering  
BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY  
Mangalpally(v), Ibrahimpatnam (M), Rangareddy -501510

# Channel Estimation algorithms For Coherent Detection of Turbo-Coded OFDM Signals

Batch Code:18MP01D10

**Major Project Stage-I Report**

Submitted to

Jawaharlal Nehru Technological University Hyderabad

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

**Bachelor of Technology**

*In*

*Electronics & Communication Engineering*

*Submitted by*

K.Naveen  
N.Srikanth  
P.Sai Nikhil  
P.Santhosh

(18E11A04E4)  
(18E11A04E9)  
(18E11A04F0)  
(18E11A04F4)

*Under the Supervision of*

**Dr.Faizan Ahmad**



Department of Electronics & Communication Engineering  
**BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY**



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
(Affiliated to JNTUH Hyderabad, Approved by AICTE and Accredited by NBA)  
Ibrahimpatnam - 501 510, Hyderabad

### Certificate

*This is to certify that the project work entitled " Channel Estimation algorithms for Coherent detection of turbo-coded ofdm signals" is the bonafide work done*

By

K.Naveen	(18E11A04E4)
N.Srikanth	(18E11A04E9)
P.Santhosh	(18E11A04F4)
P.Sai Nikhil	(18E11A04F0)

*in the Department of Electronics And Communication Engineering, BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY, Ibrahimpatnam is submitted to Jawaharlal Nehru Technological University, Hyderabad in partial fulfillment of the requirements for the award of B. Techdegree in Electronics And Communication Engineering during 2021-2022.*

Guide: Dr. Faizan Ahmad

Assistant Professor  
Dept of ECE  
Bharat Institute of Engineering and Technology,  
Ibrahimpatnam - 501 510, Hyderabad.

Head of the department: D.SANKARA REDDY

Assistant Professor  
Dept of ECE  
Bharat Institute of Engineering and Technology,  
Ibrahimpatnam - 501 510, Hyderabad.

Viva-Voce held on..... *01/07/22* .....

*[Signature]*  
Internal Examiner

*[Signature]*  
External Examiner



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
(Affiliated to JNTUH Hyderabad, Approved by AICTE & Accredited by NAAC and NBA)  
(UG Programmes: EEE, ECE, ME & CSE)  
Ibrahimpattanam - 501 510, Hyderabad, Telangana.

## DECLARATION

We hereby declare that this Major Project Report is titled “**Channel Estimation Algorithms For coherent Detection of Turbo-Coded OFDM Signals**” is a genuine work carried out by us in **B.Tech (Electronics and Communication Engineering)** degree course of **Jawaharlal Nehru Technology University Hyderabad**, and has not been submitted to any other course or university for the award of the degree by us.

Name	Roll No.	Signature of the Student
<b>N.srikanth</b>	<b>18E11A04E9</b>	<i>N. Srikanth</i>
<b>K.Naveen</b>	<b>18E11A04E4</b>	<i>K. Naveen</i>
<b>P.Sai Nikhil</b>	<b>18E11A04F0</b>	<i>P. Sai Nikhil</i>
<b>P.Santhosh</b>	<b>18E11A04F4</b>	<i>P. Santhosh</i>

**PANCHROMATIC AND MULTISPECTRAL IMAGE FUSION BY  
DEEP LEARNING AND NEURAL NETWORKS**

**Batch Code: 18MPO1809**

**A Major project Phase II Report**

Submitted to

**Jawaharlal Nehru Technological University Hyderabad**

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

**Bachelor of Technology**

*In*

***Electronics & Communication Engineering***

*Submitted by*

**E. Vijay Kumar**

**(18E11A0452)**

**K. Srikanth Reddy**

**(18E11A0461)**

**Ch. Sai Kumar**

**(18E11A0447)**

**V. Akshay Kumar**

**(18E11A0478)**

*Under the Supervision of*

**Mr. Kallush sinha**



**Department of Electronics & Communication Engineering BHARAT  
INSTITUTE OF ENGINEERING & TECHNOLOGY**

**Mangalpatnam, The Chandrababu Naidu (M) Nagarajreddy -501510**

# PANCHROMATIC AND MULTISPECTRAL IMAGE FUSION BY DEEP LEARNING AND NEURAL NETWORKS

Batch Code:18MPO1B09

## A Major project Phase II Report

Submitted to

Jawaharlal Nehru Technological University Hyderabad

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

## Bachelor of Technology

*In*

*Electronics & Communication Engineering*

*Submitted by*

E. Vijay Kumar	(18E11A0452)
K. Srikanth Reddy	(18E11A0461)
Ch. Sai Kumar	(18E11A0447)
V. Akshay Kumar	(18E11A0478)

*Under the Supervision of*

**Mr.kailash sinha**



Department of Electronics & Communication Engineering BHARAT



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

(Affiliated to JNTUH Hyderabad, Approved by AICTE and Accredited by NBA) Ibrahimpatnam -  
501 510, Hyderabad

### Certificate

This is to certify that the project work entitled "Panchromatic and Multispectral Image Fusion by  
Deep Learning and Neural Networks" is the bonafide work done

By

E. Vijay Kumar

(18E11A0452)

K. Srikanth Reddy

(18E11A0461)

Ch. Sai Kumar

(18E11A0447)

V. Akshay Kumar

(18E11A0478)

in the Department of Electronics And Communication Engineering, BHARAT INSTITUTE OF  
ENGINEERING AND TECHNOLOGY, Ibrahimpatnam is submitted to Jawaharlal Nehru  
Technological University, Hyderabad in partial fulfillment of the requirements for the award of  
B.Tech degree in Electronics And Communication Engineering during 2021-2022.

Guide: Mr. kailash sinha

Assistant Professor

Dept of ECE

Bharat Institute of Engineering and Technology,  
Technology, Ibrahimpatnam – 501 510, Hyderabad.

Viva-Voce held on..... 16/12/2021.....

Head of the department: D.SANKARA REDDY

Associate Professor

Dept of ECE

Bharat Institute of Engineering and  
Ibrahimpatnam – 501 510, Hyderabad.



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

Affiliated to JNTUH Hyderabad, Approved by AICTE & Accredited by NAAC and NBA (UG Programmes: EEE, ECE, ME & CSE)

Ibrahimpattanam - 501 510, Hyderabad, Telangana.

## DECLARATION

I hereby declare that this Major Project Report is titled "**Panchromatic and Multispectral Image Fusion By Deep Learning and Neural Networks**" is a genuine work carried out by me in B.Tech (Electronics and Communication Engineering) degree course of Jawaharlal Nehru Technology University Hyderabad, and has not been submitted to any

A DEGREE OF BACHELOR OF TECHNOLOGY  
TECHNOLOGY FOR THE PHYSICAL SCIENCES

1981 - 1982

A Major Project Report

Submitted

Jawahar Lal Nehru Technological University, Hyderabad

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

**Bachelor of Technology**

In

**Electronics & Communication Engineering**

Submitted by

**B. AKSHAYA 18E11A0404**

**D. HARSHITHA 18E11A0407**

**T. VAISHA REDDY 18E11A0436**

**G. NAVYA JYOTHI REDDY 18E11A0441**

Under the Supervision of

**Dr. ANIL KUMAR SAHU**



Department of Electronics & Communication Engineering  
**BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY**

Mangalagiri (S), Ibrahimpatnam(M), RangaReddy - 501510

**A DESIGN OF PROTOTYPIC HAND TALK ASSISTIVE  
TECHNOLOGY FOR THE PHYSICALLY CHALLENGED**

Batch code: 18MP01A03

**A Major Project Report**

Submitted to

Jawaharlal Nehru Technological University Hyderabad

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

**Bachelor of Technology**

In

**Electronics & Communication Engineering**

Submitted by

**B. AKSHAYA 18E11A0404**

**D. HARSHITHA 18E11A0407**

**T. VARSHA REDDY 18E11A0436**

**G. NAVYA JYOTHI REDDY 18E11A0441**

Under the Supervision of

**Dr. ANIL KUMAR SAHU**



**Department of Electronics & Communication Engineering  
BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY**

**Mangalpally(v), Ibrahimpatnam(M), RangaReddy – 501510**



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

(Affiliated to JNTUH Hyderabad, Approved by AICTE and Accredited by NBA)

Ibrahimpattanam – 501510, Hyderabad

**Certificate**

This is to certify that the Project work entitled "*A Design of Prototypic Hand Talk Assistive Technology for the Physically Challenged*" is the bonafide work done

By

**B. AKSHAYA 18E11A0404**

**D. HARSHITHA 18E11A0407**

**T. VARSHA REDDY 18E11A0436**

**G. NAVYA JYOTHI REDDY 18E11A0441**

In the Department of Electronics And Communication Engineering , **BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**, Ibrahimpattanam is submitted to Jawaharlal Nehru Technological University , Hyderabad in partial fulfilment of the requirements for the award of **B.Tech** degree in **Electronics And Communication Engineering** during 2021-2022.

Guide:

*Anil Kumar Sahu*  
**Dr. Anil Kumar Sahu**

Dept of ECE

Bharat Institute of Engineering and Technology,

Ibrahimpattanam - 501510, Hyderabad.

*D. Sankara Reddy*  
**Head of the Department**

**Mr. D. Sankara Reddy**

Dept of ECE

Bharat Institute of Engineering and Technology,

Ibrahimpattanam – 501510, Hyderabad

Viva-Voce held on

*6/7/22*

*Anil Kumar Sahu*  
**Internal Examiner**

*D. Sankara Reddy*  
**External Examiner**



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

(Affiliated to JNTUH Hyderabad, Approved by AICTE & Accredited by NAAC and NBA)

(UG Programmes : EEE, ECE, ME, CSE)

Ibrahimpattanam – 501510, Hyderabad, Telangana.

### DECLARATION

We hereby declare that this Major Project Report is titled "**A DESIGN OF PROTOTYPIC HAND TALK ASSISTIVE TECHNOLOGY FOR THE PHYSICALLY CHALLENGED**" is a genuine work carried out by us in B.Tech (Electronics and Communication Engineering) degree course of **Jawaharlal Nehru Technology University Hyderabad**, and has not been submitted to any other course or university for the award of the degree by us.

Name.	Roll No.	Signature of the Student
1. B. Akshaya	18E11A0404	Akshaya
2. D. Harshitha	18E11A0407	Harshitha
3. T. Varsha	18E11A0436	Varsha
4. G. Nargya Jyothi Reddy	18E11A0441	G. Nargya Reddy

**COMMUNICATION BETWEEN VEHICLE TO VEHICLE  
USING LORA**

Batch Code: 18MP01B07

**A Major Project Report**

Submitted to

**Jawaharlal Nehru Technological University Hyderabad**

*in Partial Fulfilment of the Requirements for the award of  
the Degree of*

**Bachelor of Technology**

*In*

**Electronics & Communication Engineering**

*Submitted by*

E.Tejaswini Reddy	18E11A0451
V.Anusha Reddy	18E11A0480
C.Murali Koushik	18E11A0449

*Supervised by*

**Mrs Praveen Kulkarni**

*(Assistant Professor)*



Department of Electronics & Communication Engineering

**JARAT INSTITUTE OF ENGINEERING & TECHNOLOGY**

Mangalagiri, West Godavari District, Rangareddy -501510

# COMMUNICATION BETWEEN VEHICLE TO VEHICLE USING LORA

Batch Code: 18MP01B07

## A Major Project Report

Submitted to

Jawaharlal Nehru Technological University Hyderabad

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

## Bachelor of Technology

In

*Electronics & Communication Engineering*

*Submitted by*

E.Tejaswini Reddy	18E11A0451
V.Anusha Reddy	18E11A0480
C.Murali Koushik	18E11A0449

*Under the Supervision of*

**Mrs.Prakruti Kulkarni**

(Assistant professor)



Department of Electronics & Communication Engineering  
BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY  
Mangalpally(v), Ibrahimpatnam (M), Rangareddy -501510



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
(Affiliated to JNTUH Hyderabad, Approved by AICTE and Accredited by NBA)  
(UG Programmes: EEE, ECE, ME & CSE)  
Ibrahimpatnam - 501 510, Hyderabad

## Certificate

*This is to certify that the project work entitled "Comunication between vehicle to vehicle using LoRa" is the bonafide work done*

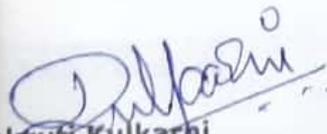
By

E.Tejaswini Reddy	18E11A0451
V.Anusha Reddy	18E11A0480
C.Murali Koushik	18E11A0449

in the Department of Electronics And Communication Engineering,  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**, Ibrahimpatnam is  
submitted to **Jawaharlal Nehru Technological University**,

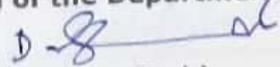
**Hyderabad** in partial fulfillment of the requirements for the award of  
**B.Tech** degree in **Electronics And Communication Engineering**  
during **2021-2022**.

Guide:

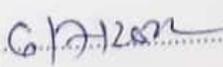
  
**Mrs.Praktuti Kulkarni**  
(Assistant professor)

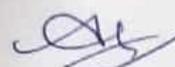
Dept of ECE  
Bharat Institute of Engineering and Technology,  
Ibrahimpatnam - 501 510, Hyderabad.

Head of the Department:

  
**Mr.D.Sankara Reddy**

Dept of ECE  
Bharat Institute of Engineering and Technology,  
Ibrahimpatnam - 501 510, Hyderabad.

Viva-Voce held on..  ..

  
Internal Examiner

  
External Examiner



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
(Affiliated to JNTUH Hyderabad, Approved by AICTE & Accredited by NAAC and NBA)  
(UG Programmes: EEE, ECE, ME & CSE) Ibrahimpatnam  
- 501 510, Hyderabad, Telangana.

### DECLARATION

We hereby declare that this Major Project Report is titled **“COMUNICATION BETWEEN VEHICLE TO VEHICLE USING LORA”** is a genuine work carried out by us in B.Tech (Electronics and Communication Engineering) degree course of **Jawaharlal Nehru Technology University Hyderabad**, and has not been submitted to any other course or university for the award of the degree by us.

Name	Roll No.	Signature of the Student
E.Tejaswini Reddy	18E11A0451	<i>Tejaswini</i>
V.Anusha Reddy	18E11A0480	<i>V-Anusha</i>
C.Murali Koushik	18E11A0449	<i>C.Koushik</i>

# GESTURE BASED INPUT SYSTEM

Batch Code: 18E11A0403

A Major Project Report

Submitted to

Jawaharlal Nehru Technological University Hyderabad

In Partial Fulfilment of the Requirement  
For the Award of the Degree of

**Bachelor of Technology**

In

Electronics & Communication Engineering

Submitted by

B.V.S. SATYA VARUN	-18E11A0403
G. BHANU SHANKAR	-18E11A0412
J. VAMSHI GOUD	-18E11A0416
K. SAI KRISHNA	-18E11A0419

Under the Supervision of

**SUNIL KUMAR REDDY**  
Assistant professor



BIHAR INSTITUTE OF ENGINEERING & TECHNOLOGY

Department of Electronics & Communication Engineering

Mangalpally, Bypass, Mangalagiri, Guntur District, Mangalagiri - 501510

# **GESTURE BASED INPUT SYSTEM**

Batch Code: 18MP01A02

**A Major Project Report**

Submitted to

Jawaharlal Nehru Technological University Hyderabad

In Partial Fulfilment of the Requirements

For the Award of the Degree of

**Bachelor of Technology**

*In*

**Electronics & Communication Engineering**

Submitted by

B.V.S. SATYA VARUN                      -18E11A0403

G. BHANU SHANKAR                      -18E11A0412

J. VAMSHI GOUD                         -18E11A0416

K. SAI KRISHNA                         -18E11A0419

Under the Supervision of

**G. SURENDER REDDY**

Assistant Professor



**BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY**

# **GESTURE BASED INPUT SYSTEM**

**Batch Code: 18MP01A02**

**A Major Project Report**

**Submitted to**

**Jawaharlal Nehru Technological University Hyderabad**

**In Partial Fulfilment of the Requirements  
For the Award of the Degree of**

**Bachelor of Technology**

*In*

**Electronics & Communication Engineering**

**Submitted by**

<b>B.V.S. SATYA VARUN</b>	<b>-18E11A0403</b>
<b>G. BHANU SHANKAR</b>	<b>-18E11A0412</b>
<b>J. VAMSHI GOUD</b>	<b>-18E11A0416</b>
<b>K. SAI KRISHNA</b>	<b>-18E11A0419</b>

**Under the Supervision of**

**G. SURENDER REDDY**

**Assistant Professor**



**BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY**

**Department of Electronics & Communication Engineering**

**Mangalpally(v), Ibrahimpatnam (M), Rangareddy -501510**



## BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
(Affiliated to JNTUH Hyderabad, Approved by AICTE and Accredited by NBA)  
Ibrahimpattam - 501 510, Hyderabad

### Certificate

This is to certify that the project work entitled “**GESTURE BASED INPUT SYSTEM**” is the bonafide work done

By

B.V.S. SATYA VARUN	-18E11A0403
G. BHANU SHANKAR	-18E11A0412
J. VAMSHI GOUD	-18E11A0416
K. SAI KRISHNA	-18E11A0419

In the Department of Electronics And Communication Engineering, BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY, Ibrahimpattam is submitted to Jawaharlal Nehru Technological University, Hyderabad in partial fulfilment of the requirements for the award of B.Tech degree in Electronics And Communication Engineering during 2021-2022.

Guide name:

**G. Surender Reddy**

Assistant professor  
Dept of ECE  
Bharat Institute of Engineering and  
Technology,  
Ibrahimpattam - 501 510, Hyderabad.

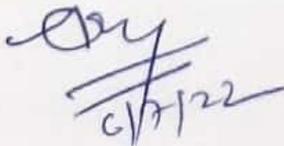
Head of the Department:

**Mr.D.Sankara Reddy**

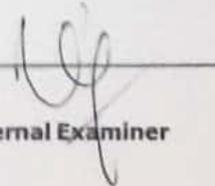
Dept of ECE  
Bharat Institute of Engineering and  
Technology,  
Ibrahimpattam - 501 510, Hyderabad.

Viva-Voce held on... 06/7/2022

Internal Examiner

  
06/7/22

External Examiner





## BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
(Affiliated to JNTUH Hyderabad, Approved by AICTE & Accredited by NAAC and NBA)  
(UG Programmes: EEE, ECE, ME & CSE)  
Ibrahimpattam - 501 510, Hyderabad, Telangana.

### DECLARATION

We hereby declare that this Major Project Report is titled "**GESTURE BASED INPUT SYSTEM**" is a genuine work carried out by us in **B.Tech (Electronics and Communication Engineering)** degree course of **Jawaharlal Nehru Technology University Hyderabad**, and has not been submitted to any other course or university for the award of the degree by us.

Name	Roll No.	Signature of the Student
B.V.S. SATYA VARUN	18E11A0403	
G. BHANU SHANKAR	18E11A0412	
J. VAMSHI GOUD	18E11A0416	
K. SAIKRISHNA	18E11A0419	

UP BOARD OF TECHNICAL EDUCATION (UNIVERSITY OF APPLIED SCIENCES)  
WALAPUR, PUNJAB  
HYDERABAD

Osmania University Hyderabad

Department of Electrical and Communication Engineering  
Osmania University Hyderabad

Bachelor of Technology

Electrical and Communication Engineering

1. ELECTRIC CIRCUITS	EEET101
2. NETWORK THEORY	EEET102
3. ANALOG ELECTRONICS	EEET103
4. DIGITAL ELECTRONICS	EEET104
5. COMMUNICATION SYSTEMS	EEET105

Department of Electrical and Communication Engineering

Osmania University Hyderabad

Osmania University Hyderabad



Department of Electrical and Communication Engineering  
Osmania University Hyderabad  
WALAPUR, PUNJAB  
HYDERABAD

# IOT BASED TRAFFIC MONITORING SYSTEM USING ARDUINO

Batch Code: 18MP01C06

A Major Project Report

Submitted to

Jawaharal Nehru Technological University Hyderabad

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

**Bachelor of Technology**

In

*Electronics and Communication Engineering*

Submitted by

B.AKHIL REDDY	18E11A0488
G.NAVYA SRI	18E11A0495
G.MANVITHA	18E11A0496
P.HARI PRIYA	18E11A04B2
P.SOWMYA REDDY	18E11A04B5

*Under the Supervision of*

**T.V. SURESH KUMAR**

Assistant Professor



Department of Electronics and Communication Engineering  
**BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY**  
Mandali, Chittoor, Chittoor (M), Rangareddy -501510

# IoT BASED TRAFFIC MONITORING SYSTEM USING ARDUINO

Batch Code: 18MP01C04

## A Major Project Report

Submitted to

Jawaharlal Nehru Technological University Hyderabad

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

## Bachelor of Technology

In

*Electronics and Communication Engineering*

*Submitted by*

B.AKHIL REDDY	18E11A0488
G.NAVYA SRI	18E11A0495
G. MANVITHA	18E11A0496
P.HARI PRIYA	18E11A04B2
P.SOWMYA REDDY	18E11A04B5

*Under the Supervision of*

**T.V. SURESH KUMAR**

Assistant Professor



Department of Electronics and Communication Engineering  
BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY  
Mangalpally(v), Ibrahimpatnam (M), Rangareddy -501510



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

(Affiliated to JNTUH Hyderabad, Approved by AICTE and Accredited by NBA)

Ibrahimpattam - 501 510, Hyderabad

## Certificate

*This is to certify that the project work entitled "Iot based traffic monitoring system using arduino" is the bonafide work done.*

**By**

B.AKHIL REDDY	18E11A0488
G.NAVYA SRI	18E11A0495
G.MANVITHA	18E11A0496
P.HARI PRIYA	18E11A04B2
P.SOWMYA REDDY	18E11A04B5

In the Department of Electronics And Communication Engineering, BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY, Ibrahimpattam is submitted to Jawaharlal Nehru Technological University, Hyderabad in partial fulfilment of the requirements for the award of B.Tech degree in Electronics And Communication Engineering during 2021- 2022.

Guide:   
T.V. SURESH KUMAR

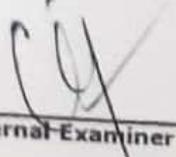
Head of the Department:   
Mr.D. Sankara Reddy

Dept of ECE  
Bharat Institute of Engineering and Technology,  
Ibrahimpattam - 501 510, Hyderabad.

Dept of ECE  
Bharat Institute of Engineering and Technology,  
Ibrahimpattam - 501 510, Hyderabad.

Viva-Voce held on 4/7/2022

Internal Examiner 

  
External Examiner



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
(Affiliated to JNTUH Hyderabad, Approved by AICTE & Accredited by NAAC and  
NBA)  
(UG Programmes: EEE, ECE, ME & CSE)  
Ibrahimpattam - 501 510, Hyderabad, Telangana.

### DECLARATION

We hereby declare that this Major Project Report is titled "Iot Based Traffic Monitoring System Using Arduino" is a genuine work carried out by us in **B.Tech (Electronics and Communication Engineering)** degree course of **Jawaharlal Nehru Technology University Hyderabad**, and has not been submitted to any other course or university for the award of the degree by us.

Name	Roll No.	Signature of the Student
BAKHIL REDDY	18E11A0488	B. Akhil Reddy
GNAVYA SRI	18E11A0495	Navya
MANVITHA	18E11A0496	Manvitha
HARI PRIYA	18E11A04B2	Hanipriya.p
SOWMYA REDDY	18E11A04B5	Sowmya Reddy

# HUMAN POSE ESTIMATION USING PYTHON

Batch Code: 18MP01A05

## A Major Project Report

Submitted to

Jawaharlal Nehru Technological University Hyderabad

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

## Bachelor of Technology

In

*Electronics & Communication Engineering*

Submitted by

NAKKA MADHURI 18E11A0424

NARRA DIMPUL 18E11A0426

ALE NIKITHA 19E15A0401

CHINTHKOTI SUSHMITHA 19E15A0408

Under the Supervision of

DR ANB. KUMAR SAHU

Associate Professor



Department of Electronics & Communication Engineering  
BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY  
Mangaladally (V), Prabhavaram (M), Rangareddy 501510



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

(Affiliated to JNTUH Hyderabad, Approved by AICTE and Accredited by NBA)  
Ibrahimpattam - 501 510, Hyderabad

*Certificate*

*This is to certify that the project work entitled "Human Pose Estimation Using Python" is the bonafide work done*

By

NAKKA MADHURI

18E11A0424

NARRA DIMPUL

18E11A0426

ALE NIKITHA

19E15A0401

CHINTHKOTI SUSHMITHA

19E15A0408

*in the Department of Electronics And Communication Engineering, BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY, Ibrahimpattam is submitted to Jawaharlal Nehru Technological University, Hyderabad in partial fulfillment of the requirements for the award of B.Tech degree in Electronics And Communication Engineering during 2021-2022.*

Guide:

**Dr. Anil Kumar Sahu**

Designation  
Dept of ECE  
Bharat Institute of Engineering and Technology,  
Ibrahimpattam - 501 510, Hyderabad.

Head of the Department:

**Mr. D. Sankara Reddy**

Dept of ECE  
Bharat Institute of Engineering and Technology,  
Ibrahimpattam - 501 510, Hyderabad.

Viva-Voce held on 6/7/22

  
**Internal Examiner**  
**External Examiner**



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

(Affiliated to JNTUH Hyderabad, Approved by AICTE & Accredited by NAAC and NBA)

(UG Programmes: EEE, ECE, ME & CSE)

Ibrahimpatnam - 501 510, Hyderabad, Telangana.

### DECLARATION

We hereby declare that this Major Project Report is titled **“HUMAN POSE ESTIMATION USING PYTHON”** is a genuine work carried out by us in **B.Tech (Electronics and Communication Engineering)** degree course of **Jawaharlal Nehru Technology University Hyderabad**, and has not been submitted to any other course or university for the award of the degree by us.

**Roll No.**

**Signature of the Student**

18E11A0424

Adhuri

18E11A0426

N. Sampul

19E15A0401

A. Nikitha

19E15A0408

Ch. Sushmithe

**SURVEILLANCE ROBOT FOR WEB DATA  
MONITORING USING RASPBERRY PI**

Batch Code: 18MP01A01

**Major Project Report**  
Submitted to  
**Jawaharlal Nehru Technological University Hyderabad**

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

**Bachelor of Technology**  
In  
**Electronics & Communication Engineering**

Submitted by

**NAGILLA PAVANI**  
**PASHAM SAIKUMAR REDDY**  
**PATHIREDDY SREESHMA**  
**RATHALAVATH THARUN**

**18E11A0423**  
**18E11A0429**  
**18E11A0430**  
**18E11A0433**

Under the Supervision of

**Dr. Amit Agrawal**  
(Associate Professor)



**Department of Electronics & Communication Engineering**  
**BHARATI INSTITUTE OF ENGINEERING & TECHNOLOGY**  
Mangalpally (V), Ibrahimpatnam (M), Rangareddy -501510

2021 - 2022

# Surveillance Robot for Web Data Monitoring Using Raspberry Pi

Batch Code: 18MP01A01

## Major Project Report

Submitted to  
Jawaharlal Nehru Technological University Hyderabad

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

## Bachelor of Technology

In

## Electronics & Communication Engineering

Submitted by

NAGILLA PAVANI

PASHAM SAIKUMAR REDDY

PATHIREDDY SREESHMA

RATHALAVATH THARUN

18E11A0423

18E11A0429

18E11A0430

18E11A0433

Under the Supervision of

Dr.Amit Agrawal  
(Associate Professor)



Department of Electronics & Communication Engineering BHARAT

INSTITUTE OF ENGINEERING & TECHNOLOGY

Mangalpally(v), Ibrahimpatnam (M), Rangareddy -501510

2021 - 2022



**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
(Affiliated to JNTUH Hyderabad, Approved by AICTE and Accredited by NBA)  
Ibrahimpatnam - 501 510, Hyderabad

## **Certificate**

This is to certify that the project work entitled “**Surveillance Robot for Web Data Monitoring Using Raspberry Pi**” is the bonafide work done

**By**

<b>PAVANI</b>	<b>18E11A0423</b>
<b>SAIKUMAR</b>	<b>18E11A0429</b>
<b>SREESHMA</b>	<b>18E11A0430</b>
<b>THARUN</b>	<b>18E11A0433</b>

in the Department of Electronics And Communication Engineering, **BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**, Ibrahimpatnam is submitted to **Jawaharlal Nehru Technological University, Hyderabad** in partial fulfillment of the requirements for the award of **B.Tech** degree in Electronics And Communication Engineering during 2021-2022.

**Guide:**

**Dr. Amit Agrawal**  
Associate Professor  
Dept of ECE

**Head of the Department:**

**Mr.D.Sankara Reddy**  
Assistant Professor(M.TECH)  
Dept of ECE

**Bharat Institute of Engineering and Technology,**  
**Ibrahimpatnam – 501 510, Hyderabad.**



**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
(Affiliated to JNTUHI Hyderabad, Approved by AICTE & Accredited by NAAC and NBA)  
(UG Programmes: EEE, ECE, ME & CSE)  
Ibrahimpatnam - 501 510, Hyderabad, Telangana.

### DECLARATION

We hereby declare that this Major Project Report is titled "SURVEILLANCE ROBOT FOR WEB DATA MONITORING USING RASPBERRY PI" is a genuine work carried out by us in B-Tech (Electronics and Communication Engineering) degree course of Jawaharlal Nehru Technology University Hyderabad and has not been submitted to any other course or university for the award of the degree by us.

Name	Roll No.	Signature of the Student
N. PAVANI	18E11A0423	
P. SAIKUMAR REDDY	18E11A0429	
P. SREESHMA REDDY	18E11A0430	
R. THARUN	18E11A0433	



**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
(Affiliated to JNTUH Hyderabad, Approved by AICTE and Accredited by NBA)  
Ibrahimpatnam - 501 510, Hyderabad

## Certificate

This is to certify that the project work entitled "Surveillance Robot for Web Data Monitoring Using Raspberry Pi" is the bonafide work done

By

PAVANI	18E11A0423
SAIKUMAR	18E11A0429
SREESHMA	18E11A0430
THARUN	18E11A0433

in the Department of Electronics And Communication Engineering, **BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**, Ibrahimpatnam is submitted to **Jawaharlal Nehru Technological University, Hyderabad** in partial fulfillment of the requirements for the award of **B.Tech** degree in Electronics And Communication Engineering during 2021-2022.

**Guide:**

**Dr. Amit Agrawal**  
Associate Professor  
Dept of ECE

**Head of the Department:**

**Mr. D. Sankara Reddy**  
Assistant Professor (M.TECH)  
Dept of ECE

**Bharat Institute of Engineering and Technology,  
Ibrahimpatnam – 501 510, Hyderabad.**

Viva-Voce held on.....01/7/22.....

**Internal Examiner**

**External Examiner**

# GPS AND GSM BASED VEHICLE BLACK BOX SYSTEM

Model No. 15000111

## A MAJOR Project Report

Submitted to

Department of Electronics and Communication Engineering

Government College of Engineering, Salem

**Bachelor of Engineering**

Department of Electronics and Communication Engineering

Registration No.

- |               |          |
|---------------|----------|
| ABHIRAM K. S. | 15000111 |

Under the Supervision of

**DR. K. K. K. K.**  
Professor



Department of Electronics & Communication Engineering

GOVERNMENT COLLEGE OF ENGINEERING, SALEM

Government College of Engineering, Salem

# GPS AND GSM BASED VEHICLE BLACK BOX SYSTEM

Batch Code : 180701211

## A MAJOR Project Report

Submitted to

Jawaharlal Nehru Technological University Hyderabad

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

**Bachelor of Technology**

in

*Electronics & Communication Engineering*

Submitted by

CHINDAM SAIKUMAR	18E11A04D6
PALEM AKHILA GOUD	18E11A04E1
PALEM NAVEEN KUMAR	18E11A04F2
VIPAL A SRI HARSHA	19E15A0429

Under the Supervision of

**Mr. L.RAVI KUMAR**  
Assistant professor



Department of Electronics & Communication Engineering  
**BIJARAJESWARARAO ENGINEERING & TECHNOLOGY**  
Mar gopuram, Hyderabad (M), Rangareddy -501510

# GPS AND GSM BASED VEHICLE BLACK BOX SYSTEM

Batch Code : 18MPO1D11

## A MAJOR Project Report

Submitted to

Jawaharlal Nehru Technological University Hyderabad

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

## Bachelor of Technology

In

*Electronics & Communication Engineering*

*Submitted by*

CHINDAM SAIKUMAR	18E11A04D6
PALEM AKHILA GOUD	18E11A04F1
PALEM NAVEEN KUMAR	18E11A04F2
UPPALA SRI HARSHA	19E15A0429

*Under the Supervision of*

**Mr. I.RAVIKUMAR**  
**Assistant professor**



Department of Electronics & Communication Engineering

BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY

Mangalpally (v), Ibrahimpatnam (M), Rangareddy -501510



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

(Affiliated to JNTUH Hyderabad, Approved by AICTE and Accredited by NAAC and NBA)

Ibrahimpattanam - 501510, Hyderabad

***Certificate***

*This is to certify that the project work entitled "GPS and GSM Based Vehicle Black Box System" is the bonafide work done*

By

CHINDAM SAIKUMAR	(18E11A04D6)
PALEM AKHILA GOUD	(18E11A04F1)
PALEM NAVEEN KUMAR	(18E11A04F2)
UPPALA SRI HARSHA	(19E15A0429)

*in the Department of Electronics And Communication Engineering, BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY, Ibrahimpattanam is submitted to Jawaharlal Nehru Technological University, Hyderabad in partial fulfillment of the requirements for the award of B. Tech degree in Electronics And Communication Engineering during 2021-2022.*

Guide:

**Mr. I. RAVI KUMAR**

Assistant Professor

Dept of ECE

Bharat Institute of Engineering and Technology,  
Ibrahimpattanam - 501 510, Hyderabad.

Head of the Department:

**Mr. D. Sankara Reddy**

Admin Incharge

Dept of ECE

Bharat Institute of Engineering and Technology,  
Ibrahimpattanam - 501 510, Hyderabad.

Viva-Voce held on 6/7/22

Internal Examiner

External Examiner



DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
(Affiliated to JNTUH Hyderabad, Approved by AICTE & Accredited by NAAC and NBA)  
(UG Programmes: EEE, ECE, ME & CSE)  
Ibrahimpatnam - 501 510, Hyderabad, Telangana.

### DECLARATION

We here by declare that this Major Project Report is titled **"GPS AND GSM BASED VEHICLE BLACK BOX SYSTEM "** is a genuine work carried out by us in **B.Tech (Electronics and Communication Engineering)** degree course of **Jawaharlal Nehru Technology University Hyderabad**, and has not been submitted to any other course or university for the award of the degree by us.

Name	Roll No.	Signature of the Student
CHINDAM SAIKUMAR	18E11A04D6	C. Saikumar
PALEM AKHILA GOUD	18E11A04F1	Akhila Palem
PALEM NAVEEN KUMAR	18E11A04F2	Palem Naveen
UPPALA SRI HARSHA	19E15A0429	U. Sri Harsha

# Monitoring the Weight and Leakage of LPG Using IoT

Batch Code: 18MP01D03

## A Mini Project Report

Submitted to

Jawaharlal Nehru Technological University Hyderabad

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

## Bachelor of Technology

In

*Electronics & Communication Engineering*

*Submitted by*

**E. Tejaswi** (18E11A04D9)

**U. Vaishnavi** (18E11A04G4)

**M. Achyut** (18E11A04E8)

**A. Pravallika** (18E11A04C8)

*Under the Supervision of*

**G. Joy Sangeeth Raj**

Assistant Professor, ECE



Department of Electronics & Communication Engineering  
BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY  
Mangalpally (v), Ibrahimpatnam (M), Rangareddy -501510



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
(Affiliated to JNTUH Hyderabad, Approved by AICTE and Accredited by NBA)  
Ibrahimpattam - 501 510, Hyderabad

### Certificate

*This is to certify that the project work entitled "Monitoring the Weight and Leakage of LPG Using IoT" is the bonafide work done*

By

E. Tejaswi	(18E11A04D9)
U. Vaishnavi	(18E11A04G4)
M. Achyut	(18E11A04E8)
A. Pravallika	(18E11A04C8)

*in the Department of Electronics And Communication Engineering, BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY, Ibrahimpattam is submitted to Jawaharlal Nehru Technological University, Hyderabad in partial fulfillment of the requirements for the award of B.Tech degree in Electronics And Communication Engineering during 2021-2022.*

Guide:

*G. Joy Sangeeth Raj*

Assistant Professor  
Dept of ECE  
Bharat Institute of Engineering and Technology,  
Ibrahimpattam - 501 510, Hyderabad.

Head of the Department:

*Mr. D. Sankara Reddy*

Assistant Professor  
Dept of ECE  
Bharat Institute of Engineering and Technology,  
Ibrahimpattam - 501 510, Hyderabad.

Viva-Voce held on... *22/01/2022* .....

*[Signature]*  
Internal Examiner

*[Signature]*  
External Examiner

# GAS LEAKAGE DETECTION USING IOT

Batch Code:18MP01D09

## MINI Project

Submitted to  
Jawaharlal Nehru Technological University Hyderabad

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

## Bachelor of Technology

In

*Electronics & Communication Engineering*

*Submitted by*

C.Madhusudhan	(18E11A04D4)
D.Abhishek	(18E11A04D8)
P.Srija	(18E11A04F5)
Y.Uday Kumar	(18E11A04G6)

*Under the Supervision of*

### Guide Names

MR.R.Sathish Kumar



Department of Electronics & Communication Engineering  
BHARAT INSTITUTE OF ENGINEERING & TECHNOLOGY



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Affiliated to JNTUH Hyderabad, Approved by AICTE and Accredited by NBA)

Ibrahimpattanam - 501 510, Hyderabad

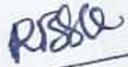
Certificate

*This is to certify that the project work entitled "GAS LEAKAGE DETECTION USING" is the bonafide work done*

By

C.Madhusudhan	(18E11A04D4)
D.Abhishek	(18E11A04D8)
P.Srija	(18E11A04F5)
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*in the Department of Electronics And Communication Engineering, BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY, Ibrahimpattanam is submitted to Jawaharlal Nehru Technological University, Hyderabad in partial fulfillment of the requirements for the award of B. Tech degree in Electronics And Communication Engineering during 2021-2022.*

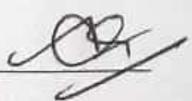
Guide:   
Mr. R. SATHISH KUMAR  
(Assistant Professor)

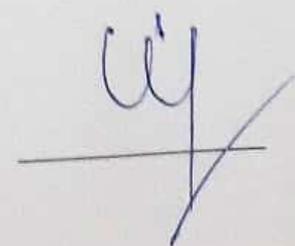
Dept of ECE  
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Head of the department:  
Mr. D. SANKARA REDDY   
(Assistant Professor)

Dept of ECE  
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Viva-Voce held on..... 22/02/2022 .....







DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING  
BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Affiliated to JNTUH Hyderabad, Approved by AICTE & Accredited by NAAC and NBA)

(UG Programmes: EEE, ECE, ME & CSE)

Ibrahimpattanam - 501 510, Hyderabad, Telangana.

### DECLARATION

We hereby declare that this Major Project Report is titled "GAS LEAKAGE DETECTION USING IOT" is a genuine work carried out by us in B.Tech (Electronics and Communication Engineering) degree course of Jawaharlal Nehru Technology University Hyderabad, and has not been submitted to any other course or university for the award of the degree by us.

Name	Roll No.	Signature of the Student
C. Madhusudhan	18E11A04D4	C. Madhusudhan
D. Abhishek	18E11A04D8	Abhishek
P. Srija	18E11A04F5	P. Srija
Y. Uday Kumar	18E11A04G6	Y. Uday Kumar

# Missile Detection and Destroying System

Batch Code: 18MP01A06

## A Mini Project Report

Submitted to

Jawaharlal Nehru Technological University Hyderabad

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

## Bachelor of Technology

In

*Electronics & Communication Engineering*

*Submitted by*

<b>B Pavan Kumar</b>	<b>19E15A0404</b>
<b>B Soma Reddy</b>	<b>19E15A0405</b>
<b>C Jeshwanth</b>	<b>19E15A0406</b>
<b>C Rupesh Kumar</b>	<b>19E15A0407</b>

*Under the Supervision of*

**Mr. T V Suresh Kumar**

Assistant professor



Department of Electronics & Communication Engineering  
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

Accredited by NAAC, Accredited by NBA (UG Programs: CSE, ECE, EEE & Mechanical) Approved by AICTE,  
Affiliated to JNTUH Hyderabad  
Ibrahimpattanam-501 510, Hyderabad, Telangana.

*Certificate*

*This is to certify that the Major Project work entitled*  
**“RECOGNITION AND CLASSIFICATION OF OBJECTS”**  
*is the Bonafide work done*

By

SHIVAM DAYAMA	(18E11A0543)
BATHARAJU SHIVA SAI	(18E11A0505)
ULLIWARVENKATT RAMANA	(18E11A0545)
BACHALLA JEEVAN KUMAR	(18E11A0502)

In the Department of Computer Science and Engineering, **BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**, Ibrahimpattanam is submitted to **Jawaharlal Nehru Technological University, Hyderabad** in partial fulfillment of the requirements for the award of Bachelor of Technology degree in Computer Science and Engineering during **2018-2022**.

Guide:

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Assistant Professor  
Dept of CSE  
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Head of the Department:

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Assistant Professor  
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Viva-Vocals/Examination .....

  
Internal Examiner

  
External Examiner



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
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Affiliated to JNTU11 Hyderabad  
Ibrahimpatnam -501 510, Hyderabad, Telangana

## Certificate

*This is to certify that the project work entitled “**PREDICTION OF HEART DISEASE USING MACHINE LEARNING**” is the bonafide work done*

By

K.SITHAN KUMAR  
JATIN JANGID  
M.SAI KUMAR  
D.DEVI CHARAN

(18E11A0525)  
(18E11A0521)  
(18E11A0529)  
(18E11A0508)

*In the Department of Computer Science and Engineering, BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY, Ibrahimpatnam is submitted to Jawaharlal Nehru Technological University, Hyderabad in partial fulfillment of the requirements for the award of B.Tech degree in Computer Science and Engineering during 2018-2022.*

*B. Manasa  
5/5/22*

Guide:

**MRS. B. MANASA**

Assistant Professor  
Dept of CSE,  
Bharat Institute of Engineering and Technology,  
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Head of the Department:

**DR. KARPAGA SELVI S**

Associate Professor  
Dept of CSE,  
Bharat Institute of Engineering and Technology,  
Ibrahimpatnam – 501 510, Hyderabad.

Viva-Voice held on.....

Internal Examiner

External Examiner



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

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Approved by AICTE, Affiliated to JNTUH Hyderabad  
Ibrahimpatnam -501 510, Hyderabad, Telangana

## Certificate

*This is to certify that the project work entitled "PREDICTION OF CROP YIELD USING MACHINE LEARNING" is the bonafide work done by*

18CSD PS-II:04

DURISETY MANIDEEP	(18E11A05E6)
A SAINATH REDDY	(18E11A05D5)
KURVA MANOHAR	(18E11A05G0)
KONENTI-KAUSHIK	(16E11A05H3)

*In the Department of Computer Science and Engineering, BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY, Ibrahimpatnam is submitted to Jawaharlal Nehru Technological University, Hyderabad in partial fulfillment of the requirements for the award of B.Tech degree in Computer Science and Engineering during 2018- 2022.*

Guide:

Mrs. NOORJAN

Assistant Professor

Dept of CSE,

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Head of the Department:

Dr. KARPAGA SELVI S

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Viva-Voce held on..... 7/7/2022.....

Internal Examiner

External Examiner



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

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Approved by AICTE, Affiliated to JNTUH Hyderabad  
Ibrahimpattam-501 510, Hyderabad, Telangana.

**Certificate**

*This is to certify that the project work entitled “Exergaming Using Python Pose Detection” is the Bonafide work done*

By

PARLAPALLY SHIVA SAKETH REDDY  
GADDAM BHARATH SIMHA REDDY  
G.SAI SRUJAN  
PALLE PHANENDRA GOUD

(18E11A0540)  
(18E11A0513)  
(19E15A0501)  
(18E11A0539)

*in the Department of Computer Science and Engineering, BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY, Ibrahimpattam is submitted to Jawaharlal Nehru Technological University, Hyderabad in partial fulfillment of the requirements for the award of Bachelor of Technology degree in Computer Science and Engineering during 2018-2022.*

Guide: *Falak*

Ms. Falak Naaz

Assistant Professor

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Dept of CSE

Bharat Institute of Engineering and Technology,

Ibrahimpattam – 501 510, Hyderabad

Viva-Voce held on.....

Internal Examiner

External Examiner



**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

Accredited by NAAC, Accredited by NBA (UG Programmes: CSE,ECE,EEE & Mechanical) Approved by AICTE, Affiliated to JNTUH Hyderabad  
Ibrahimpattam -501 510, Hyderabad, Telangana

**Certificate**

*This is to certify that the Major Project Work entitled “SEMI- SUPERVISED MACHINE LEARNING APPROACH FOR DDOS DETECTION” is the Bonafide work done*

**By**

**M SAI TARUN**

**(18E11A0530)**

**GHANTA SAI CHARITH**

**(18E11A0544)**

**BANOTH SAI KIRAN**

**(18E11A0504)**

*In the Department of Computer Science and Engineering, BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY, Ibrahimpattam is submitted to Jawaharlal Nehru Technological University, Hyderabad in partial fulfillment of the requirements for the award of B.Tech degree in Computer Science and Engineering during 2018- 2022.*

**Guide:**

**DR. VIVEK DUBEY**

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**Head of the Department:**

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Associate Professor

Dept of CSE,

Bharat Institute of Engineering and

Ibrahimpattam - 501510, Hyderabad.

Viva-Voce held on .....

**Internal Examiner**

**External examiner**