



**MEENAKSHI COLLEGE OF ENGINEERING**  
No-12, Vembuli Amman Koil Street, West K.K Nagar,  
Chennai - 600 078

### REPORT

**Type of activity:** Project

**Title of activity:** "ANDROID BASED SMART RESCUE SYSTEM USING REAL TIME LOCATION SHARING WITH BLACK BOX TECHNOLOGY"

**Name of Organization:** Qmax Systems India Pvt Ltd

**Name of Contact Person:** Mr.Saravanabhavan Chandrasekar - VP of Hardware Engineering

**Designation:**Managing Director

**Date and time:** 29.10.2021 & 03:00 PM

**Target Students:** B.E Students

**Total number of students attended:** 03

**About activity:**

The Android-based Smart Rescue System represents a groundbreaking advancement in emergency response technology. Leveraging real-time location sharing and Black Box technology, this system enhances the efficiency and effectiveness of rescue operations during critical situations. This report delves into the architecture, functionality, and potential impact of this innovative system. In emergency situations such as natural disasters, accidents, or medical crises, timely rescue operations are crucial for saving lives and minimizing damage. Traditional rescue methods often face challenges in locating and reaching affected individuals swiftly. The Android-based Smart Rescue System addresses these challenges by integrating real-time location sharing and Black Box technology into a comprehensive rescue platform.

**Outcome:**

The Android-based Smart Rescue System represents a significant advancement in emergency response technology. By harnessing the power of real-time location sharing and Black Box technology, this system enhances the efficiency and effectiveness of rescue operations, ultimately contributing to safer communities and better disaster preparedness.

  
CO-ORDINATOR

  
**PRINCIPAL**  
MEENAKSHI COLLEGE OF ENGINEERING  
NO.12, YEMBULIAMMAN KOIL STREET,  
WEST K.K. NAGAR, CHENNAI - 600 078



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Chennai - 600 078

**LIST OF STUDENTS**

S.NO	NAME OF THE STUDENTS
1.	ASHWINI.K
2.	GOPIKA R
3.	RAMYA J

*h. l.*

  
CO-ORDINATOR

**PRINCIPAL**  
**MEENAKSHI COLLEGE OF ENGINEERING**  
NO.12, VEMBULIAMMAN KOIL STREET,  
WEST K.K NAGAR, CHENNAI - 600 078

# RESULTS & OUTPUT

## 7.1 DRIVER CONTROL PROGRAM

```
DriverControl.py X
C:\Users> admin > Downloads > DriverControl.py
1 import RPi.GPIO as GPIO
2 import time
3
4
5 GPIO.setmode(GPIO.BOARD)
6
7 Motor11 = 31      # Input1 Pin1
8 Motor12 = 33      # Input1 Pin2
9 Motor21 = 35      # Input2 Pin1
10 Motor22 = 37     # Input2 Pin2
11
12
13 GPIO.setup(Motor11,GPIO.OUT)
14 GPIO.setup(Motor12,GPIO.OUT)
15 GPIO.setup(Motor21,GPIO.OUT)
16 GPIO.setup(Motor22,GPIO.OUT)
17
18
19 def forward():
20     print('Forward')
21     #ser.write(b'u')
22     GPIO.output(Motor11,GPIO.LOW)
23     GPIO.output(Motor12,GPIO.HIGH)
24     GPIO.output(Motor21,GPIO.LOW)
25     GPIO.output(Motor22,GPIO.HIGH)
26     time.sleep(0.3)
27     Stop()
28 def backward():
29     print('Backward')
```

FIG 7.1(a) DRIVER CONTROL PROGRAM

```
DriverControl.py X
C > Users > admin > Downloads > DriverControl.py
59     time.sleep(0.1)
60
61
62     # Initialize a TCP client socket using SOCK_STREAM
63     while 1:
64         print("Enter Command:")
65         cmd=input()
66         if(cmd=='f'):
67             forward()
68         elif(cmd=='b'):
69             backward()
70         elif(cmd=='r'):
71             right()
72         elif(cmd=='l'):
73             left()
74
75
```

FIG 7.1(c) DRIVER CONTROL PROGRAM

### 7.2 DRIVER CONTROL OUTPUT

```
Shell
***
Enter Command:
f
Forward
Stop
Enter Command:
b
Backward
Stop
Enter Command:
r
Right
***
```

*Handwritten signature*

FIG 7.2 DRIVER CONTROL OUTPUT

PRINCIPAL  
MEMAKSHI COLLEGE OF ENGINEERING  
75/AMBULIYAMMAN KOTHU STREET  
KANKAR NAGAR CHENNAI-600071

25.10.2021

From

Q max Systems India Pvt Ltd,  
795 Trunk Road,  
Poonamalle,  
Chennai-600 056

To

The Head of the Department,  
Department of Electronics and Communication Engineering,  
Meenakshi College of Engineering,  
Chennai-78.

Dear Madam,

Sub : Acceptance for Project Work  
Ref : MoU between Meenakshi College of Engineering and Q max Systems India Pvt  
Ltd, Ref No.MCE-2021-2022/MOU/42 letter dated on 22.10.2021

We are pleased to offer Project work for the students of ECE department, Meenakshi college of Engineering on the title " Android Based Smart Rescue System Using Real Time Location Sharing with Black Box Technology" during October 2021 to February 2022. The students can attend any two weeks in the mentioned period.

We appreciate your interest in Q max Systems India Pvt Ltd.

Thanking you

Yours sincerely,



Mr.Saravanabhavan Chandrasekar



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75
```

FIG 7.1(c) DRIVER CONTROL PROGRAM

### 7.2 DRIVER CONTROL OUTPUT

```
Shell
***
Enter Command:
f
Forward
Stop
Enter Command:
b
Backward
Stop
Enter Command:
r
Right
***
```

*u. l...*  
PRINCIPAL  
MEENAKSHI COLLEGE OF ENGINEERING  
NO 12, VEMBULAMMAH KOIL STREET,  
WEST K. NAGAR, CHENNAI-600 057

FIG 7.2 DRIVER CONTROL OUTPUT

## ACKNOWLEDGEMENT

We express our sincere thanks and owe profound gratitude to our beloved managing trustee **Thiru. A. N. Radhakrishnan, M.A., D.COM.**, Meenakshi College of Engineering for giving this opportunity to study in this distinguished institute to develop our career.

We have glade to express our subterranean gratitude to our respected Principal **Dr. R SESHASAYANAN, M.E., Ph.D. Professor** for his permission to work on this project.

We take this opportunity to express our thanks to the head of the Department, Electronics and Communication Engineering **Mr.S.M SIVARAMAN, M.Tech., Ph.D., Assistant Professor** for his consent to carry out this project, encouragement during the course of the project and providing all the facilities to complete this project successfully.

We extend our sincere thanks and deep sense of gratitude to our project guide **M.V CRISPIN, M.E., Assistant Professor**, for providing us with the necessary inputs and guidance to complete this project within the stipulated time.

We indebted to the project coordinators, **Dr.M.ANANTHALAKSHMI, M.E., Ph.D., Assistant Professor** who provide us with valuable suggestion during the review of our project.

We wish to thank all the teaching and non-teaching staff of the Electronics and Communication Engineering Department for their constant support throughout the during suggestion during the review of our project.

We wish to thank all the teaching and non-teaching staff of the Electronics and Communication Engineering Department for their constant support throughout the duration of this project.

Finally, we owe thanks to the almighty for his grace and our beloved parents for their prayers in making this project a great success.