**ANTI COLLISION**

*A PROJECT REPORT*

*Submitted to*

**MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL**

*by*

**GAURAV KUMAR**

**(Roll No:12500313037)**

*in partial fulfilment for the award of the degree*

*of*

**BACHELOR OF TECHNOLOGY**

**IN**

**ELECTRONICS AND COMMUNICATION ENGINEERING**

****

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**BENGAL COLLEGE OF ENGINEERING AND TECHNOLOGY**

**DURGAPUR 713212,**

**WEST BENGAL, INDIA**

**MAY 2017**

**ANTI COLLISION**

*A PROJECT REPORT*

*Submitted to*

**MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL**

*by*

**AVDHESH KUMAR**

**(Roll No:12500313026)**

*in partial fulfilment for the award of the degree*

*of*

**BACHELOR OF TECHNOLOGY**

**IN**

**ELECTRONICS AND COMMUNICATION ENGINEERING**

****

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**BENGAL COLLEGE OF ENGINEERING AND TECHNOLOGY**

**DURGAPUR 713212,**

**WEST BENGAL, INDIA**

**MAY 2017**

**CERTIFICATE**

This is to certify that the project report entitled “**ANTI COLLISION**” submitted by

**GAURAV KUMAR** to the Maulana Abul Kalam Azad University of Technology, West Bengal in partial fulfilment for the award of Degree of Bachelor of Technology in Electronics and Communication Engineering is a bonafide record of the project work carried out by him under my supervision during the year 2016-2017.

Name

(Project Guide)

Designation

Dr. Ved Prakash Roy

(Head of the Department ECE)

**CONTENTS**

**NAME PAGE NO.**

1. ACKNOWLEDGEMENT 1

ii. ABSTRACTS 2

iii. INTRODUCTION 3

iv. OBJECTIVE OF PROJECT 4

v. ADOPTED, SYSTEM IMPLEMENTATION 5-6

& DETAILS OF HARDWARE & SOFTWARE USED

vi. UART COMMUNICATION WITH WIFI ESP 10

vii. DEFINITION OF PROBLEM 12-13

viii. WIFI AP COMMUNICATION 14-15

ix. WIFI P2P COMMUNICATION 16

x. I2C COMMUNICATION WITH ACCELEROMETR 17-18

xi. LOGIC CONVERTER CIRCUIT 19

xii. COST ANALYSIS 20

xiii SYSTEM MAINTENANCE & EVALUATION 21

xiv. FUTURE SCOPE 22

xv. CONCLUSION 23

xvi. REFERENCES 23

**LIST OF FIGURES**

**FIGURE NAME & NUMBER PAGE NO.**

**ANTI COLLISION**

*A PROJECT REPORT*

*Submitted to*

**MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL**

*by*

**BHANU PRAKASH AGARWAL**

**(Roll No:12500313028)**

*in partial fulfilment for the award of the degree*

*of*

**BACHELOR OF TECHNOLOGY**

**IN**

**ELECTRONICS AND COMMUNICATION ENGINEERING**

****

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**BENGAL COLLEGE OF ENGINEERING AND TECHNOLOGY**

**DURGAPUR 713212,**

**WEST BENGAL, INDIA**

**MAY 2017**

**ANTI COLLISION**

*A PROJECT REPORT*

*Submitted to*

**MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL**

*by*

**MOHAMMAD ASIF**

**(Roll No:12500313051)**

*in partial fulfilment for the award of the degree*

*of*

**BACHELOR OF TECHNOLOGY**

**IN**

**ELECTRONICS AND COMMUNICATION ENGINEERING**

****

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**BENGAL COLLEGE OF ENGINEERING AND TECHNOLOGY**

**DURGAPUR 713212,**

**WEST BENGAL, INDIA**

**MAY 2017**

**ANTI COLLISION**

*A PROJECT REPORT*

*Submitted to*

**MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL**

*by*

**AKRAMUL ALI**

**(Roll No:12500313009)**

*in partial fulfilment for the award of the degree*

*of*

**BACHELOR OF TECHNOLOGY**

**IN**

**ELECTRONICS AND COMMUNICATION ENGINEERING**

****

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**BENGAL COLLEGE OF ENGINEERING AND TECHNOLOGY**

**DURGAPUR 713212,**

**WEST BENGAL, INDIA**

**MAY 2017**

**ANTI COLLISION**

*A PROJECT REPORT*

*Submitted to*

**MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL**

*By*

**BHANU PRAKASH AGARWAL (12500313028)**

**GAURAV KUMAR (12500313037)**

**MOHAMMAD ASIF (12500313051)**

**AVDHESH KUMAR (12500313026)**

**AKRAMUL ALI (12500313009)**

*in partial fulfilment for the award of the degree*

*of*

**BACHELOR OF TECHNOLOGY**

**IN**

**ELECTRONICS AND COMMUNICATION ENGINEERING**

****

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**BENGAL COLLEGE OF ENGINEERING AND TECHNOLOGY**

**DURGAPUR 713212,**

**WEST BENGAL, INDIA MAY 2017**

**CERTIFICATE**

This is to certify that the project report entitled “**ANTI COLLISION**” submitted by **BHANU PRAKSH AGARWAL** to the Maulana Abul Kalam Azad University of Technology, West Bengal in partial fulfilment for the award of Degree of Bachelor of Technology in Electronics and Communication Engineering is a bonafide record of the project work carried out by him under my supervision during the year 2016-2017.

Name

(Project Guide)

Designation

Dr. Ved Prakash Roy

(Head of the Department ECE)

**CERTIFICATE**

This is to certify that the project report entitled “**ANTI COLLISION**” submitted by **MOHAMMAD ASIF** to the Maulana Abul Kalam Azad University of Technology, West Bengal in partial fulfilment for the award of Degree of Bachelor of Technology in Electronics and Communication Engineering is a bonafide record of the project work carried out by him under my supervision during the year 2016-2017.

Name

(Project Guide)

Designation

Dr. Ved Prakash Roy

(Head of the Department ECE)

**CERTIFICATE**

This is to certify that the project report entitled “**ANTI COLLISION**” submitted by

**AVDHESH KUMAR** to the Maulana Abul Kalam Azad University of Technology, West Bengal in partial fulfilment for the award of Degree of Bachelor of Technology in Electronics and Communication Engineering is a bonafide record of the project work carried out by him under my supervision during the year 2016-2017.

Name

(Project Guide)

Designation

Dr. Ved Prakash Roy

(Head of the Department ECE)

**CERTIFICATE**

This is to certify that the project report entitled “**ANTI COLLISION**” submitted by

**BHANU PRAKASH AGARWAL , GAURAV KUMAR , MOHAMMAD ASIF , AVDHESH KUMAR , AKRAMUL ALI** to the Maulana Abul Kalam Azad University of Technology, West Bengal in partial fulfilment for the award of Degree of Bachelor of Technology in Electronics and Communication Engineering is a bonafide record of the project work carried out by him under my supervision during the year 2016-2017.

Name

(Project Guide)

Designation

Dr. Ved Prakash Roy

(Head of the Department ECE)

**CERTIFICATE**

This is to certify that the project report entitled “**ANTI COLLISON**” submitted by

**AKRAMUL ALI** to the Maulana Abul Kalam Azad University of Technology, West Bengal in partial fulfilment for the award of Degree of Bachelor of Technology in Electronics and Communication Engineering is a bonafide record of the project work carried out by him under my supervision during the year 2016-2017.

Name

(Project Guide)

Designation

Dr. Ved Prakash Roy

(Head of the Department ECE)