

Figure. No.	Figure Name	Page No
1	Block diagram:A	10
2	Block diagram:B	11
3	Node MCU (Fig.A)	12
4	Node MCU (Fig.B)	13
5	L298N Motor Driver Module (Fig.A)	15
6	Internal Circuit Diagram of L298N Motor Driver Module (Fig.B)	17
7	DC Motor (Fig.A)	19
8	Electromagnetic Motor (Fig.B)	20
9	Ultrasonic Sensor (Fig.A)	21
10	Actual Working of Ultrasonic Sensor (Fig.B)	21
11	9 Volt Battery	23
12	Light Emitting Diode (LED)	24
13	Jumper Wire	25
14	Relay	27
15	1N4007 Diode	28
16	Capacitors	29
17	Resistor	30
18	Circuit Diagram of Power Supply	31
19	Circuit Diagram of controller	31
20	Circuit Diagram of L298N Motor Driver	32
21	Circuit Diagram of Relay	33
22	Flowchart of Motor Driver IC	36
23	Flowchart of Ultrasonic Sensor	37
24	Flowchart of Robotic Car	38

LIST OF TABLES:

Table. No	Table name	Page no
1	Comparison Table	5
2	Planning Table	8
3	Node MCU Technical Specification	14
4	Pin description of L298N Motor Driver Module	17

CONTENTS

Certificate-I	II
Certificate-II	III
Acknowledgement	IV
List of Figures	V
List of Tables	VI

Sr. No.	Name of topic	Page No.
	Introduction	
	1.1 Abstract	1
	1.2 Introduction	2
1	1.3 Need of the project	3
	1.4 Aim of the project	3
	1.5 Objective of the project	3
	1.6 Literature Survey	4
	1.7 Planning	8
	Hardware Design	
	2.1 Block Diagram	10
	2.1.1 Block Diagram Description	11
	2.2 Components Required	12
	2.2.1 Node MCU	12
	2.2.2 L298N Motor Driver Module	15
	2.2.3 DC Motor	19
	2.2.4 Ultrasonic Sensor	21
2	2.2.5 9 Volt Battery	23
	2.2.6 Light Emitting Diode	24
	2.2.7 Jumper Wire	25
	2.2.8 Relay	27
	2.2.9 Diode	28
	2.2.10 Capacitor	29
	2.2.11 Resistors	30
	2.3 Circuit Diagram	19

	Software part	
3	3.1 Algorithm	34
	3.2 Flow Chart	36
	3.2.1 Flowchart of Motor Driver IC	36
	3.2.2 Flowchart of Ultrasonic Sensor	37
	3.2.3 Flowchart of Robotic Car	38
	System Overview	
4	4.1 Advantages	39
	4.2 Disadvantages	39
	4.3 Applications	39
5	Conclusion	40
6	References	41