

**IMPLEMENTATION OF TRACKING AND ALLERT SYSTEM IN THE
HUMAN FOLLOWING LUGGAGE ROBOT**

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STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

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ABSTRACT

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The purpose of this thesis work is to implement the autonomous human-following luggage robot system into an ordinary luggage, to develop a tracking system for the luggage, and also to develop an allert system from the luggage. The implementation section consists of mechanical design to modify the luggage. The allert system development consists of buzzer which will buzz if the luggage is getting lost or if the owner turn the buzzer on from the Android Application. The tracking system also able to locate the location of the luggage by using GPS. The GPS coordinate of the luggage can be requested from the owner's smartphone. An Android program is developed by using MIT App Invetor in order to turn the luggage on and off, to turn on the buzzer, and also the get the GPS coordinate. The program is also able to check the battery level of the luggage. Bluetooth is used to provide communication the luggage and the smartphone. To find the GPS coordinate of the luggage, GPS receiver is used and GSM module is used to send the luggage location to the owner's smartphone.

Keywords: Human-following Luggage Robot, Bluetooth, GSM, GPS, Android Smartphone



DEDICATION

I dedicate this works for my God, my family, my friends, my teachers, and my country,
Indonesia



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TABLE OF CONTENTS

	Page
STATEMENT BY THE AUTHOR	1
ABSTRACT.....	3
DEDICATION	5
ACKNOWLEDGEMENTS	6
TABLE OF CONTENTS	7
LIST OF FIGURES	10
LIST OF TABLES	12
CHAPTER 1 - INTRODUCTION	13
1.1 Background	13
1.2 Thesis Purpose	14
1.3 Thesis Problem.....	15
1.4 Thesis Scope	15
1.5 Thesis Limitation	15
1.6 Thesis Structure.....	16
CHAPTER 2 - LITERATURE REVIEW	17
2.1 Introduction to Human Following Luggage Robot.....	17
2.2 Physical Modelling of Human Luggage Follower Robot.....	17
2.3 Theoretical Perspectives.....	18
2.3.1 Microcontroller	18
2.3.2 General Positioning System (GPS) [1].....	18
2.3.3 Bluetooth.....	19
2.4 Previous Studies.....	20
2.4.1 Implementation Of Distance-Measuring System Using Ultrasonic To Be Used In An Autonomous Human-Following Luggage Robot.....	20
2.4.2 Wireless Video Surveillance Robot Controlled using Simple Bluetooth Android Application.....	21
CHAPTER 3 - RESEARCH METHODS	23
3.1 General Overview	23
3.2 Mechanical Design.....	25
3.2.1 Mechanical Modification's Parts Design.....	25
3.2.2 Compartment Box Design	27
3.2.3 Mechanical Calculation	28
3.3 Electrical Design	30
3.3.1 Arduino Mega 2560 [5]	30
3.3.2 Ultrasonic Sensor HC-SR04	31
3.3.3 DC MOTOR (Zheng Ke ZGB42RH 100H)	33
3.3.4 IBT_2 30A Motor Driver.....	34
3.3.5 Bluetooth Module HC-05	35
3.3.6 Ublox Neo 6 GPS Module	36

3.3.7	SIM8001 GSM Module	37
3.3.8	Power Supply	39
3.3.9	Printed Circuit Board (PCB)'s Design	40
3.4	Program Design.....	41
3.4.1	Luggage Robot's Software and Programming Overview.....	42
3.4.2	MIT Apps Programming.....	45
3.5	Test Plan	48
3.5.1	Performance Test	48
3.5.2	GPS Tracker Measurement	48
CHAPTER 4 - RESULTS AND DISCUSSIONS		49
4.1	Results and Discussions Overview	49
4.2	Luggage Robot Manufacturing Results	49
4.2.1	Luggage Robot Parts.....	49
4.2.2	PCB Result.....	51
4.3	Component Testing	51
4.3.1	Ultrasonic Sensor Test	51
4.3.2	DC Motor Test	55
4.3.3	GPS Module Test.....	57
4.4	Human Following Luggage Robot Reliability Test	61
4.4.1	Range Detection Test	61
4.4.2	Angle Detection Test	62
4.4.3	Speed Capability	63
4.4.4	Straight Following Test.....	65
4.4.5	Straight-Turn Following Test.....	66
4.4.6	Luggage Robot Stop Test.....	67
CHAPTER 5 - CONCLUSIONS AND RECCOMENDATIONS		69
5.1	Conclusions	69
5.2	Recommendations	69
GLOSSARY.....		70
REFERENCES		71
APPENDIX A - TECHNICAL DRAWING.....		72
A.1	Luggage Modification Parts	72
A.2	Compartment Box	76
APPENDIX B - DATA SHEET		77
B.1	Arduino Mega 2560.....	77
B.2	Ultrasonic Sensor HC-SR04.....	79
B.3	SIM8001 GSM Module.....	82
B.4	UBlox NEO 6M GPS Module.....	84
B.5	HC 05 Bluetooth Module	87
B.6	LM2596 Voltage Step-Down Regulator	89
B.7	ZHENGKE ZGB42RH DC Motor	91
APPENDIX C - PROGRAMMING CODE		92
APPENDIX D - BILL OF MATERIAL.....		103

