

DEVELOPMENT OF LOCATION BASED HAPTIC FEEDBACK VEST

By

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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**DEVELOPMENT OF LOCATION BASED HAPTIC FEEDBACK VEST**

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This research objective is to develop a location based haptic feedback vest. The vest will consist of twelve ERM motors, six on the front side, and six on the back side. The motor is controlled by microcontroller, Arduino. The Arduino will parse the data from computer in order to activate the motor as required. The idea is to simulate what happen in the game to make it as immersive as possible. The communication between computer and the Arduino is connected wirelessly using Bluetooth. The game used is custom game because the game has been published usually didn't give out the data, the vest need. During the development of the vest, there are some findings reveal such as: the ERM Motor can be controlled using open loop control system and the stronger the ERM motor is, more controllable the system is. The conclusion of this thesis the location based haptic feedback vest has been developed. The vest still has many available improvements. However, the initial goal to develop the haptic vest has been complete.

Keywords: Haptic Feedback, Haptic Vest, Virtual Reality, ERM Motor



DEDICATION

I dedicate this works to God,
My Family, who always support me through this thesis,
My friends, who always encourage me to never give up,
My country, Indonesia,
And to all VR enthusiast in Indonesia.



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TABLE OF CONTENTS

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.....	13
1.3 Thesis Problems.....	14
1.4 Thesis Scope	14
1.5 Thesis Limitation.....	14
1.6 Significance of Study	14
1.7 Thesis Organization.....	15
CHAPTER 2 - LITERATURE REVIEW	16
2.1 Virtual Reality	16
2.1.1 Telepresence	16
2.2 Haptic Feedback	17
2.2.1 Location Based Haptic Feedback	18
2.3 Eccentric Rotation Mass Motor.....	18
2.3.1 Math Model of Eccentric Rotation Mass Motor.....	19
2.4 Telemetry Data	20
2.5 Serial Communication	21

2.6 Microcontroller	21
2.7 Arduino	22
2.8 MPU6050	22
2.9 HC-05 Bluetooth Module	24
2.10 SolidWorks	24
2.11 Processing IDE	25
CHAPTER 3 – RESEARCH METHODS	27
3.1 Design Requirement	27
3.2 Design Overview	27
3.3 Actuator Selection	28
3.4 Electrical Design.....	28
3.5 Mechanical Design	29
3.6 Software Design	31
3.7 Experiment Design	32
3.7.1 Experiment Using MPU6050.....	33
3.8 Experiment Programs	33
CHAPTER 4 – RESULTS AND DISCUSSIONS.....	35
4.1 MPU6050 Test.....	35
4.2 Force Output Experiment	36
4.2.1 Finite Element Analysis.....	38
4.2.2 Revised Housing Design.....	38
4.3 ERM Motor Behavior Experiment	39
4.4 Open Loop ERM Motor Control System	45
4.4.1 Comparison with actual measurement	50
4.6 Implementation.....	52
4.6.1 Implementation to Game	53
4.6.2 Surround Haptic Experiment	53
CHAPTER 5 – CONCLUSIONS AND RECCOMENDATIONS	55
5.1 Conclusions	55
5.2 Recommendations	55

GLOSSARY	56
REFERENCES	57
APPENDIX.....	59
Curriculum Vitae	69

