

CONTENTS

APPROVAL PAGE	
SELF DECLARATION AGAINST PLAGIARISM	
ABSTRACT	i
ACKNOWLEDGMENTS	ii
PREFACE	iv
CONTENTS	v
LIST OF FIGURES	vii
LIST OF TABLES	viii
I INTRODUCTION	1
1.1 Background	1
1.2 Problem Identification	2
1.3 Objective and Contributions	3
1.4 Hypothesis	3
1.5 Scope of Work	3
1.6 Research Methodology	3
1.7 Research Plan and Action Point	4
II Basic Concepts	5
2.1 Object Recognition	5
2.2 Feature Extraction	6
2.3 Feature Memorization	7
2.4 Python	8
2.5 Visual Mapping	8
2.5.1 Depth Camera	9
2.5.2 Mapping Algorithm	10

III SYSTEM MODEL AND THE PROPOSED DESIGN	11
3.1 Proposed Method	11
3.1.1 Design System	11
3.1.2 Pre-Configuration	12
3.1.3 General System Diagram	13
3.1.4 Landmark recognition	15
3.1.5 Feature Extraction Algorithm	16
3.1.6 Feature Memorization Algorithm	19
3.1.7 Mapping Algorithm	20
3.2 Experiment Configuration	22
3.3 Experiment Type	22
3.4 Performance Matrix	23
3.5 Performance Analysis	23
IV RESULT AND ANALYSIS	24
4.1 Experiment Condition	24
4.2 Memorization Test	25
4.3 Mapping Test	31
V CONCLUSIONS AND FUTURE WORKS	34
5.1 Conclusions	34
5.2 Future Works	34
REFERENCES	35