

UNIVERSITI TEKNOLOGI MARA

**SMART PARKING SYSTEM USING
PARKING SPACE TRACKING
MODULE AND GIS**

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ABSTRACT

Frustration of finding an available parking space is still a common issue in big cities, especially during weekend and peak hours. Although various of smart parking system has been introduced since 1970's, this issues seem still not solve. The aim of this research is to study the different type of smart parking system and vehicle detection technologies that can be use in existing smart parking system. In order to help patrons on easy finding available parking space, this research will integrate the selected vehicle detection technologies into existing parking system. Herein, this research will use video image processing with interest point detection Scale Invariant Feature Transform (SIFT) as occupancy detection module and Geographic Information System (GIS). goNpark will be use to guide patron to find the available parking space easily and accurately. goNpark will provide real-time visualization of parking situation of patrons destination.

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In the name of Allah, The Most Merciful and Most Compassionate,

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It is my wish that this research can contribute a lot toward our education system and act as a guide for future reference and also contribute toward future advancement for research in Malaysia especially regarding the Smart Parking System.

Thank you

TABLE OF CONTENTS

	Page
STUDENT'S DECLARATION	i
ABSTRACT	ii
ACKNOWLEDGEMENT	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vi
LIST OF FIGURES	vii
CHAPTER ONE: INTRODUCTION	1
1.1. Background Study	1
1.2. Problem Statements	3
1.3. Research Questions	5
1.4. Research Objectives	5
1.5. Research Scope	5
1.6. Research Significant	6
CHAPTER TWO: LITERATURE REVIEW	7
2.1. Smart Parking System	7
2.1.1. Advantage Smart Parking System	7
2.2. Smart Parking System Categories	8
2.2.1. Parking Guidance and Information System (PGIS)	8
2.2.2. Transit Based Information System (TBIS)	9
2.2.3. Smart Payment System	9
2.2.4. E – Parking	10
2.2.5. Automated System	11
2.2.6. System Parking System Comparison	12
2.3. Vehicle Detection Technologies	13
2.3.1. Intrusive Sensor	13
2.3.2. Non-intrusive Sensor	14
2.3.3. Comparison of Intrusive Sensor and Non-intrusive Sensor	15
2.4. Video Image Processing	18
2.4.1. Scale Invariant Feature Transform (SIFT)	19

2.4.2.	Speeded up Robust Features (SURF)	19
2.4.3.	Oriented FAST, Rotated BRIEF (ORB)	20
2.4.4.	Performance Comparison between SIFT, SURF and ORB	20
2.5.	Geo Spatial - Geographical Information System (GIS)	21
2.6.	Responsive Web Design	22
2.7.	Related Work	23
2.6.1.	Automate Payment System	23
2.6.2.	Parking Guidance and Information System (PGIS) with Automate Payment System	23
2.6.3.	ParkEasy – Malaysia	24
2.6.4.	Smart Parking: an Application of optical Wireless Sensor Network	25
2.6.5.	Parking Guidance Information Systems, PGIS with GIS	26
2.8.	Summary	27
CHAPTER THREE: METHODOLOGY		29
3.1.	Introduction	29
3.2.	Research Design	29
3.2.1.	Phase 1: Requirements Planning	31
3.2.2.	Phase 2: User Design	32
3.2.3.	Phase 3: Construction	33
3.3.	Summary	34
CHAPTER FOUR: SYSTEM DESIGN		35
4.1.	Introduction	35
4.2.	goNpark Module	35
4.2.1.	Occupancy Detection Module	36
4.2.2.	Input and Output Module: Database Design – Entity Relationship Diagram (ERD)	39
4.2.3.	Input and Output Module: Web Server: RESTful Web Service	40
4.2.4.	Users Graphical User Interface (GUI)	42
4.3.	goNpark Module	43
4.3.1.	Interaction between Web Service to Database	44
4.3.2.	Interaction between Client to Database	45