

THE DEVELOPMENT OF AGRICULTURAL CREDIT

BY

FRANKLIN S. BROWN

ASSOCIATE PROFESSOR OF ECONOMICS, UNIVERSITY OF CALIFORNIA

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# THE DEVELOPMENT OF SMART PARKING SYSTEM

By:

Bhoman bin Mison

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Faculty of Science and Technology  
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# UNIVERSITI MALAYSIA TERENGGANU

21030 KUALA TERENGGANU, TERENGGANU, MALAYSIA

Tel. : 09-668 4100

Faks : 09-669 6441

Laman Web : <http://www.umt.edu.my>

## FAKULTI SAINS DAN TEKNOLOGI JABATAN SAINS FIZIK

### PENGAKUAN DAN PENGESAHAN LAPORAN PROJEK PENYELIDIKAN I DAN II

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk:

#### **THE DEVELOPMENT OF SMART PARKING SYSTEM (SPS)**

oleh **Bhoman bin Mison**, no matrik **UK10841** telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Fizik sebagai memenuhi sebahagian daripada keperluan Ijazah Sarjana Muda Sains Gunaan (Fizik Elektronik dan Instrumentasi), Fakulti Sains dan Teknologi, Universiti Malaysia Terengganu.

Disahkan oleh:

Penyelia Utama .....  
Nama : **WAN MARIAM WAN MUDA**  
Cop Rasmi : Pensyarah  
Jabatan Sains Fizik  
Fakulti Sains dan Teknologi  
Universiti Malaysia Terengganu  
21030 Kuala Terengganu

Tarikh: 25/4/07

Penyelia Kedua (jika ada)

Nama :

Cop Rasmi :

Tarikh:

Ketua Jabatan Sains Fizik  
Nama : **PROF. MADYA DR. SENIN HASSAN**  
Cop Rasmi : Ketua Jabatan  
Jabatan Sains Fizik  
Fakulti Sains dan Teknologi  
Universiti Malaysia Terengganu  
21030 Kuala Terengganu

Tarikh: 25 April 2007

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## LIST OF ABBREVIATIONS / SYMBOLS

### Abbreviation / Symbol

|       |                                  |
|-------|----------------------------------|
| BCD   | Binary Convert to Decimal        |
| CISC  | Complex Instruction Set Computer |
| CMS   | Car Monitoring System            |
| Con't | Continued                        |
| CPU   | Central Processing Unit          |
| DC    | Direct Current                   |
| LCD   | Liquid Crystal Display           |
| LDR   | Light Dependent Resistor         |
| LED   | Light Emitting Diode             |
| LSI   | Large-scale Integration          |
| IC    | Integrated Circuit               |
| IR    | Infrared                         |
| PC    | Personal Computer                |
| PGI   | Parking Guide Information        |
| PLC   | Programmable Logic Controller    |
| SPS   | Smart Parking System             |

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## **ABSTRACT**

Parking is a critical component of transportation policy for any locale, but especially for the large central cities. There are many system have been introduced as to solve the parking problem which using mobile technology, car monitoring and mechanical system. The purpose of this study is to develop the Smart Parking System (SPS) as an alternative to help in reducing the problem. This system is built by using Motorola 68k as a microprocessor that has been programmed according to the requirement system. The screen will display the total number of car in the parking lot and the gate-in automatically close when it's full. This system seems to give benefits for drivers as it can help to reduce in time spent, congestion, and fuel consumed.

## **ABSTRAK**

Kawasan letak kereta merupakan komponen yang kritikal bagi polisi pengangkutan di semua tempat terutamanya bandar-bandar besar. Terdapat banyak sistem yang telah diperkenalkan untuk mengatasi masalah kawasan letak kereta yang mana menggunakan teknologi mobile, sistem pengawasan kereta dan sistem mekanikal. Kajian ini bertujuan untuk menghasilkan Sistem Letak Kenderaan Pintar (SPS) sebagai alternatif untuk membantu dalam mengurangkan masalah tersebut. Sistem ini dihasilkan dengan menggunakan Motorola 68k sebagai mikroprosesor yang telah diprogramkan mengikut keperluan sistem. Skrin akan memaparkan jumlah kereta di dalam kawasan letak kereta dan pintu masuk akan tertutup secara automatik setelah ianya penuh. Sistem ini mampu memberikan kebaikan kepada para pemandu kerana ia dapat mengurangkan dari segi penggunaan masa, kesesakan dan penggunaan minyak.