



# SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

# FACULTY OF ENGINEERING AND TECHNOLOGY RAMAPURAM, CHENNAI FINAL YEAR STUDENTS - PROJECT DATA SHEET

PROJECT BATCH NO	F22		
PROJECT TITLE	INTELLIGENT PARKING MANAGEMENT SYSTEM		
GUIDE NAME	Dr. Revathy.S CSE		
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ABSTRACT			

The development of an Intelligent Parking Management System leveraging computer vision techniques and a Graphical User Interface. The problem addressed is the need for efficient parking management solutions to alleviate congestion and optimize space utilization, and make the booking process easier for the user. The methodology involves three main components: Parking Position Identification, accomplished through mouse click events and storage of positions; GUI Implementation, utilizing Tkinter and OpenCV for a user-friendly interface; Parking Space Detection, employing image processing techniques to analyze video feed for vacant spaces; and Booking Feature, allowing the user to book reserve parking space. Automatic Fee Calculation, the time spent in the parking lot will determine the fee. Results demonstrate the effectiveness of the system in accurately identifying parking positions and detecting vacant spaces. The implications of this research extend to improved parking efficiency, reduced traffic congestion, and enhanced user experience in parking facilities.

## **INFERENCE**

The Intelligent Parking Management System is a straightforward web-based application designed to assist users in finding and reserving parking slots in a small parking facility. The project aims to provide essential functionalities, including user registration and login, displaying a list of available and occupied parking slots, enabling users to reserve an available slot for a specified duration, and displaying a fixed parking fee upon reservation confirmation.

### **DELIVERABLES**

Paper Submitted

Guide Coordinator HOD