# **SMART PARKING SYSTEM**

A mini project report Submitted by

C. EZHILARASI (112819104011) M. SAI SNEHA (112819104042)

In partial fulfilment for the award of the Degree of BACHELOR OF ENGINEERING COMPUTER SCIENCE AND ENGINEERING



TJS ENGINEERING COLLEGE, PERUVOYAL



Thiruvallur Dist - 601 20**6.** 

# ANNA UNIVERSITY: CHENNAI 600 025 BONAFIDE CERTIFICATE

Certificate that this project report" **SMART PARKING SYSTEM**" bonafide work of the following students.

C. EZHILARASI	(112819104011)
M. SAI SNEHA	(112819104042)

Who carried out this project work under my supervision

SIGNATURE

DR.S.ANBU,M.E.,PH.D.,
HEAD OF THE DEPARTMENT
Department of Computer
Science and engineering,
T.J.S ENGINEERING COLLEGE,
PERUVOYAL.

SIGNATURE

MRS.S.V.PRIYANKA.,M.E(CSE).,
SUPERVISOR

Department of Computer
Science and engineering,
T.J.S ENGINEERING COLLEGE,
PERUVOYAL.

Submitted for viva voce held on 18.06.2022 at T.J.S Engineering College, Peruvoyal.

INTERNAL EXAMINER

EXTE

EXTERNAL EXAMINER

T.J.S. ENGINEERING COLLEGE

Gummidipoondi Taluk, Thiruvailur Dist - 601 206.

# Smart Parking System

## Abstract

The aim of this project is to create a prototype of a parking, android application and a web application known as Smart Parking System. This system will be used by the university. mall and any parking area around. The main purpose of this project is to develop a system that will ease the parking process around malls, schools and anywhere around. The system will help control the parking slot availability and also allow drivers to book for a parking slot before reaching the parking area. The reservation will be for a certain period of time of which if the driver does not reach the parking area, their reservation will be expired. The android application will help people book and see available parking slots. While the website, which can be accessed anywhere around will be used to see the available slot and also renew the reservation when they are expired. For this project, tools and programming languages needed for successfully build the system will be provided and discussed.



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Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.



- Decompose a Python program into functions.
- Represent compound data using Python lists, tuples, dictionaries.
- Read and write data from/to files in Python Programs.

#### TEXT BOOKS:

- 3. Allen B. Downey, "Think Python: How to Think Like a Computer Scientist", 2<sup>nd</sup> edition, Updated for Python 3, Shroff/O'Reilly Publishers, 2016
- 4. Guido van Rossum and Fred L. Drake Jr, An Introduction to Python Revised andupdated for Python 3.2, Network Theory Ltd., 2011.

CS8691

#### **ARTIFICIAL INTELLIGENCE**

L T P C 3 0 0 3

#### **OBJECTIVES:**

- To understand the various characteristics of Intelligent agents
- To learn the different search strategies in AI
- To learn to represent knowledge in solving AI problems
- To understand the different ways of designing software agents
- To know about the various applications of Al.

#### UNIT I INTRODUCTION

Introduction-Definition - Future of Artificial Intelligence - Characteristics of Intelligent Agents-Typical Intelligent Agents - Problem Solving Approach to Typical Alproblems.

## UNIT II PROBLEM SOLVING METHODS

Problem solving Methods - Search Strategies- Uninformed - Informed - Heuristics - Local Search Algorithms and Optimization Problems - Searching with Partial Observations - Constraint Satisfaction Problems - Constraint Propagation - Backtracking Search - Game Playing - Optimal Decisions in Games - Alpha - Beta Pruning - Stochastic Games

## UNIT III KNOWLEDGE REPRESENTATION

First Order Predicate Logic - Prolog Programming - Unification - Forward Chaining-Backward Chaining - Resolution - Knowledge Representation - Ontological Engineering-Categories and Objects - Events - Mental Events and Mental Objects - Reasoning Systems for Categories - Reasoning with Default Information

#### UNIT IV SOFTWARE AGENTS

Architecture for Intelligent Agents - Agent communication - Negotiation and Bargaining - Argumentation among Agents - Trust and Reputation in Multi-agent systems.

#### UNIT V APPLICATIONS

Al applications - Language Models - Information Retrieval- Information Extraction - Natural Language Processing - Machine Translation - Speech Recognition - Robot - Hardware - Perception - Planning - Moving

TOTAL:45

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