

# Implementation of Agent Based Smart Parking System using IoT

Prof. Kavita Patil<sup>1</sup>, Akshay Deepak More<sup>2</sup>, Atharv Rahul Taware<sup>3</sup>,

Mayur Ganesh Todkar<sup>4</sup>, Swaraj Praful Deshmukh<sup>5</sup>

Professor, Department of Information Technology<sup>1</sup>

Students, Department of Information Technology<sup>2,3,4,5</sup>

Zeal College of Engineering and Research, Pune, Maharashtra, India

Savitribai Phule Pune University, Pune, Maharashtra, India

**Abstract:** *Due to the increasing number of automobiles on the roads worldwide, parking space problems have arisen in many areas, causing people to spend a considerable amount of time searching for a place to park. This study proposes a smart mobile parking booking system utilizing an agent-based model. The algorithm considers the driver's location, speed, desired destination, preferred parking charge, and arrival time, to determine the most suitable and available parking spot for them. The agent-oriented approach is utilized to represent the system, with each agent responsible for addressing a particular issue.*

**Keywords:** Smart parking system, Agent-based modeling, Agent-based parking systems, Internet of Things, Smart Devices, Raspberry Pi

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