Vehicle & Parking Management

CASE STUDY

Pushpaktech Private Limited

PUSHPAK.AI
TRANSFORMING DATA

Vehicle and Parking Management

Real – time monitoring for vehicle presence at parking space and ANPR for vehicle Entry/Exit

Overview

Deployed Location: Warehouse Parking
Features: ANPR, Vehicle detection at parking space, Vehicle Log – Entry/Exit, Time elapsed by the vehicle at parking space
Deployed device: Jetson Xavier

Project requirement:

The client needed the solution to generate the real-time monitoring of the vacant and occupied parking spaces along with the time duration for which the parking space was occupied by the vehicle. They want to capture the vehicle log for entry and exit of the vehicle from the premises.

Challenges:

- High Setup infrastructure cost for setting up specialized camera for ANPR

- High infrastructure cost for deployment of solution

Pushpak Solution:

Pushpak implemented its advanced and feature rich parking management solution that works on a robust object detection and tracking AI algorithm to detect vehicle presence at the particular parking spot, capture and read the license plate of the vehicle present at the parking lot along with timestamp and duration. At entry and exit gate ANPR solution is deployed with 4 MP existing CCTV camera setup
The solution equipped with Pushpak application platform which is integrated with the solution provide user to mark the ROI (Region of Interest) at parking lot for the presence of vehicle. Object Detection model detect the vehicle presence in the marked region

and share the real-time analytics for vehicle presence. Both the solutions are provided using Pushpak application platform and deployed in the premises in 5 working days

> *Solution Highlights:*
> - *Solution is deployed on Desktop which reduces deployment cost by 20%*
> - *Solution is deployed using existing 4MP CCTV camera setup which saves and reduces the set-up infrastructure*

Pushpak Solution Advantages

- Remote monitoring option – Option to control and monitor the system remotely via network connection
- High Accuracy
- Low Setup and deployment infrastructure cost

About Pushpak

Easy adoption of AI solution deployment on EDGE devices – Raspberry Pie /Nano / Xavier/Laptop/Desktop using existing CCTV Infrastructure

Building multiple Object Detection Models along with Tracking Model. Application Platform for dynamic deployment of multiple use cases with minimal effort.

Pushpak's object detection platform has following capabilities: -

1. Solution/ Use case can be deployed in a week's time.
2. Reduction in setup cost by 50%.
3. With capability to do in premise deployment, infrastructure cost reduction by 50%