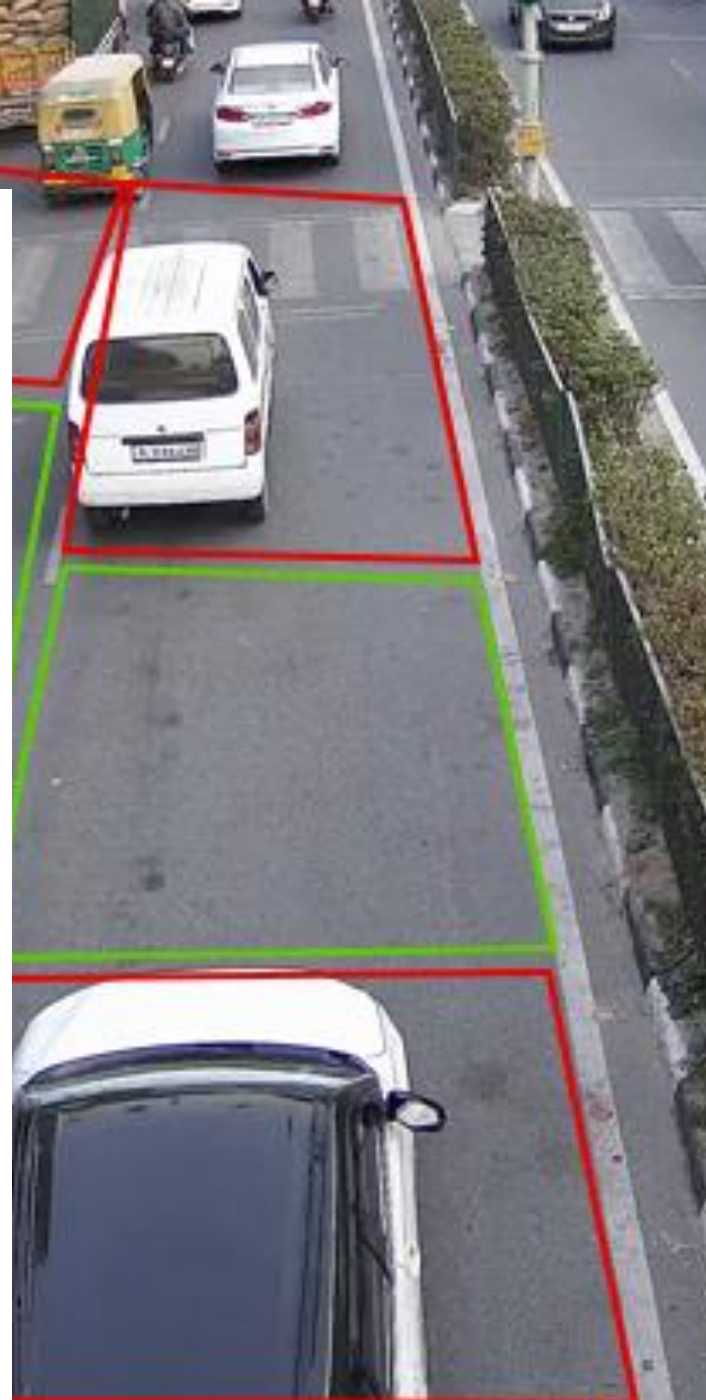


Adaptive Presence



CASE STUDY

Pushpaktech Private Limited



PUSHPAK.AI
TRANSFORMING DATA

Adaptive Presence

Determine Density of Vehicle Presence on the Road using 2MP CCTV Camera Feed

Overview

Deployed Location : Delhi NCR

Features: Mark Region of Interest (ROI), Detect presence of vehicle in the marked region

Deployed device: Raspberry Pi

Delhi Traffic Police

Delhi Traffic Police is a department of the Government of Delhi that is responsible for enforcing traffic laws and regulations in the city of Delhi, India. The Delhi Traffic Police works closely with other government agencies and organizations to improve traffic safety and reduce the number of accidents on the roads. They also use various technologies like CCTV cameras, radars, to monitor and enforce traffic laws, and also have a mobile app for citizens to report violations and other issues.

Project requirement:

The client needed the solution to generate the real-time traffic insights present on a particular traffic junction. Solution needed to be combined with ATCS (Automatic Traffic Control System) to change the traffic light time based on the real time density present at traffic junction

Challenges:

- High Setup infrastructure cost for setting up specialized camera at each junction
- High infrastructure cost for deployment of the adaptive presence

Pushpak Solution:

Pushpak implemented its advanced and feature rich traffic monitoring solution that works on a robust object detection and tracking AI algorithm to detect vehicle presence at the particular junction.

The solution equipped with Pushpak application platform which is integrated with the solution provide user to mark the ROI (Region of Interest). Object Detection model detect the vehicle presence in the marked region and share the real-time analytics with ATCS for controlling traffic light timing.

Solution Highlights:

- ***Solution is deployed on Raspberry Pi which reduces deployment cost by 60%***
- ***Solution is deployed using 2MP CCTV camera feed which reduces the set up infrastructure cost by 70%***

Pushpak Solution Advantages

- Easy Integration with ATCS
- 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%