AllGoVision Advanced Video Analytics for Singapore City Traffic Surveillance

System Integrator: D-RON
Solution Details:
  Cameras: Sony-164 nos.(Phase-I), Axis-95 nos.(Phase II),
  VMS: Milestone
  Video Analytics: AllGoVision
Vertical Market: Traffic Surveillance
Features: Illegal Parking Detection, Privacy Masking

Traffic Surveillance System is a must for modern day cities. Awareness on traffic rule violations enables the traffic authorities take corrective actions to avoid significant disturbances, from traffic jams to accidents, and even loss of life. Video Analytics detects and identifies such breaches and makes the system more effective.

Project Requirement

The Land Transport Authority (LTA) of Singapore wanted to bring the city's roadways under CCTV surveillance. They started with Phase 1 where they tested the system for specific locations and upon positive results implemented the surveillance throughout the island city. Traffic Rule enforcement against illegal parking was the key requirement. However, there was a concern of privacy due to cameras capturing events from public life.

AllGoVision Solution – Illegal Parking Detection

Video Analytics plays an important role by providing real-time alerts against traffic rule violations. In this project the violations are in the form of illegal parking. AllGoVision has a highly efficient and robust algorithm that detects illegal parking event even in busy roads with continuous traffic. Any vehicle parked or stopped in a specified zone in the camera view would initiate an alarm if it stays there for more than a defined time period. AllGoVision's advanced video analytics can intelligently differentiate a object by its classification (people or vehicle), and sends alerts only for vehicles.

AllGoVision Video Analytics
Traffic Surveillance Features

Vehicle Wrong Way Detection

Vehicle Speeding Detection

Illegal Parking Detection

Vehicle Counting

Vehicle Congestion Detection

Meta-data Search based on Vehicle Color

License Plate Detection & Capture

License Plate Recognition* (LPR) / ANPR

*works in specific countries only.

Privacy Masking

AllGoVision also provides a highly efficient feature which detects and masks human faces so that the privacy is maintained for general public who are subject to video surveillance. The monitoring process shows the masked video whereas the unmasked video is also backed up for forensic analysis requirements which may come eventually.

Illegal Parking Detection

Privacy Masking

Benefits

To identify a CCTV monitoring zone, LTA has painted lamp posts or sign posts within CCTV monitoring zones with an orange vertical strip. In these zones any vehicle when parked for more than 2 minutes would raise an alarm for the traffic management personnel to take necessary actions. Compared to a video surveillance with only cameras, the application of Video Analytics in this case has provided Effectiveness and Cost Efficiency in the process. While the accuracy is more than 90%, the general public are assured of their privacy protection in the surveillance process.

References
City / Traffic Surveillance

City Surveillance in Qatar City

Traffic Surveillance in Singapore

Surveillance for Lavasa Township, India

Bandra - Worli Sea Link, Mumbai, India

Traffic Surveillance in Turkey

About AllGoVision

AllGoVision group started in 2009 and became an independent company AllGoVision Technologies Private Limited in 2016. Headquartered in Bangalore with branches in the US and Dubai, AllGoVision is a leading video analytics software and has a global spread of sales partners, with proven installations worldwide. We have dedicated ourselves into in-depth research and product innovation. AllGoVision video analytics software is equipped with 40 plus basic and advanced Video Analytics features. It is an Open Platform Analytics integrated with many VMS manufacturers. AllGoVision focuses on providing following benefits to its customers – robust performance, cost efficiency, ease of use and customization.

AllGoVision
s e e . s e n s e . s e c u r e