



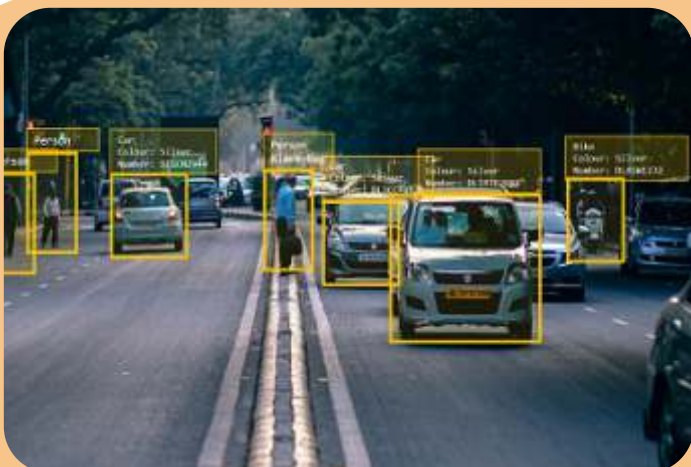
# **ARTIFICIAL INTELLIGENCE- THE FACE OF CHANGE!**



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The entertainment media has created irrationally high expectations regarding the performance of security systems- especially CCTV. Some overeager salespeople have also contributed to this “high resolution, closeup video at low cost” expectation, making it very challenging for manufacturers to achieve the quality and cost balance. Adding to the fuss is the claim that AI will bring a major change in the Security Video Analytics scene... well, is that true? Possibly!

It all started with the emergence of Artificial Intelligence (AI), that brought along asset monitoring & protection, access control, and several other decision support systems. Following it was Machine Learning (ML) that allowed a system to learn tasks based on specific processes and algorithms, such as object recognition and backup, and automatic alarming among others. Deep Learning (DL)- a subset of ML derived to achieve human brain-like functioning has changed the face of every industry, the surveillance industry just as much.



Basic Artificial Intelligence made way for Machine Learning based AI and now Deep Learning AI in Surveillance Cameras promises to be the paradigm shift in the way they will be used in future.

For those who feel ML is slightly a lag and DL spells trouble, combinations of ML and DL like in License Plate Recognition (LPR), Face Recognition (FR), and others might bring relief because of the presence of the minimum human element. Broader categories of Security applications that have made grand use of ML & DL include,

### **Object Detection & Classification**

Related algorithms combine the localization of the object and identification of its category in a single step eliminating the need for separate algorithms for the tasks at hand.



### **Pattern Recognition**

Pixel-based or object-based patterns are identified and highlighted based on the algorithm put to use only when something of interest is detected.

### **Pose Estimation**

Detecting and localizing body parts such as shoulders, elbow, ankles, etc., to highlight risk elements like 'Slip-trip-fall', Fight detection, and other behaviour analysis systems.

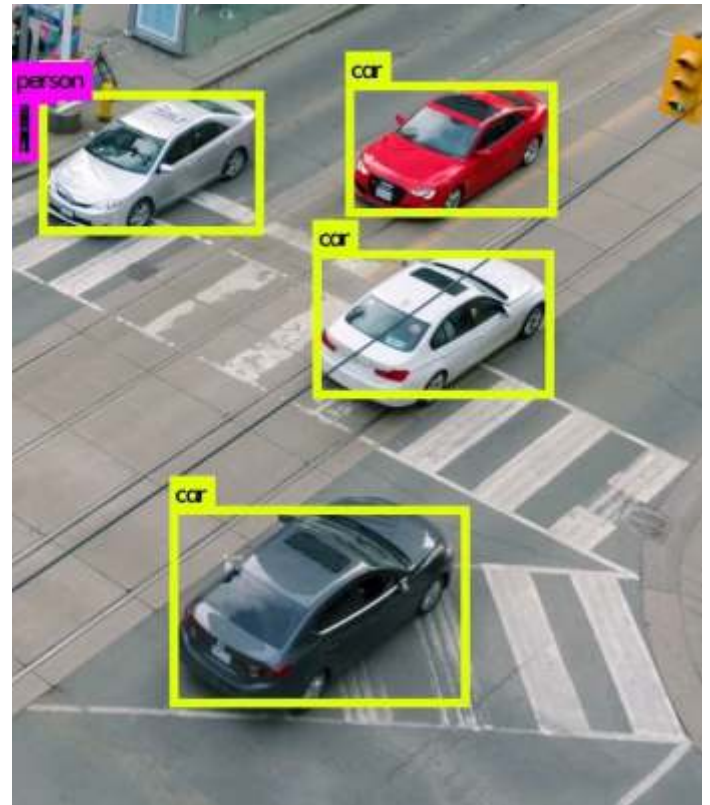
AI, ML and DL have seen widespread deployment across the security industry creating new channels for a better and more optimistic view of the Security industry worldwide, all due to the improved accuracy, lower deployment costs, and vaster applicability covering complex challenges in security and safety.

All that is needed anymore is realistic promises to the clients alongside further innovations to exceed the promises and to create a safe and secure world outside.

Wavesys cameras support machine learning based video content analytics at edge on their IP30 series cameras as well as with more than 5000 camera models of other manufacturers at server level using open platform video management software. The latest range of Wavesys cameras IP50 series offer industry leading deep learning-based analytics at edge.

## WVCA- Wavesys Video Content Analytics

WavesysGlobal specializes in Video Content Analytics, Video Management Software, IPCameras and IP Access Control Solutions. Wavesys Global offer complete of analytics suite with features like speed violation, counting, people tracker, zone & lines, object classification, pattern recognition, post estimation and many more.



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