# ENVISION

Powered by Artificial Intelligence - Neural Networks

Image classification

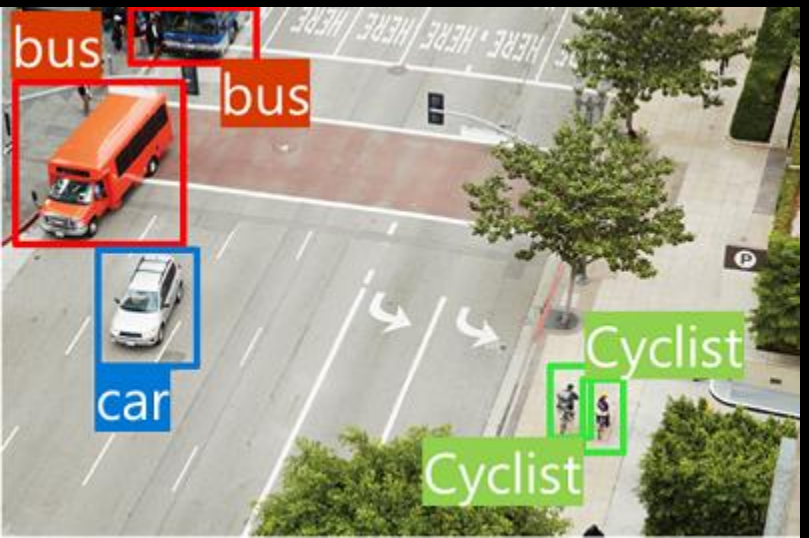
ZENVISION

ZENTECH
YOUR DIGITAL PARTNER

Imagine being able to monitor and respond to traffic events in an automated way. You can accomplish this scenario by using video-based solutions that apply AI to Internet of Things devices deployed at the edge.
We refer to these types of solutions as *Intelligent Video Analytics (IVA)* applications. They extract actionable insights through the application of computer vision algorithms that operate on live  video frames.

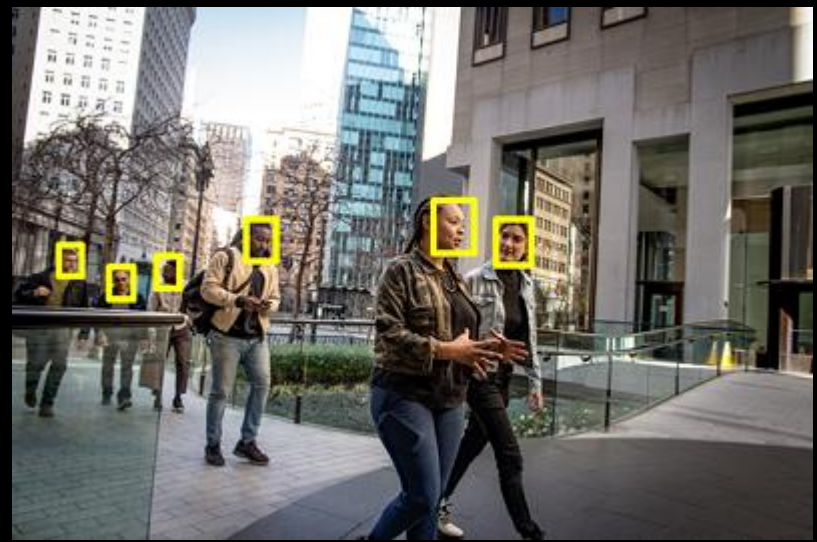
## COMPUTER VISION ALGORITHMS

### OBJECT DETECTION

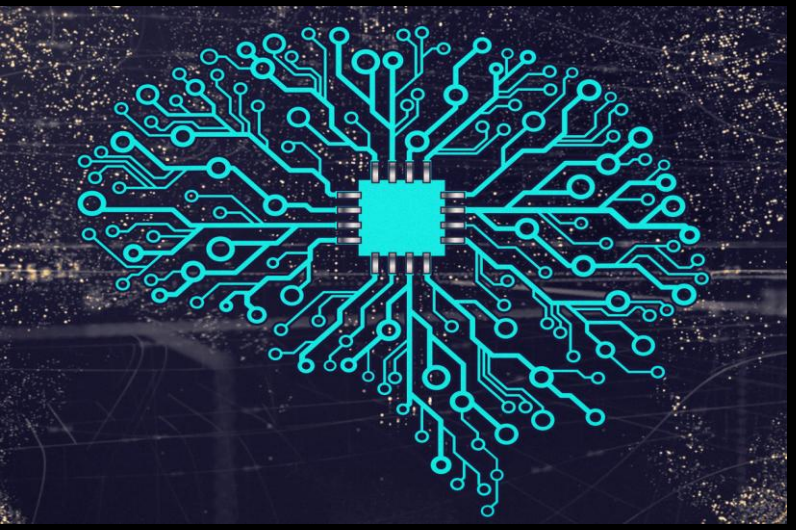



### IMAGE CLASSIFICATION


### OBJECT TRACKING



# ZENVISION
## AI TECHNOLOGY INFRASTRUCTURE



**ZENVISION**, our comprehensive configurable video analytics platform for toll roads, uses NVIDIA's end-to-end vision AI pipeline, production-ready AI models, TAO Toolkit, and Deep Stream SDK.

Using these excellent tools, we managed to decrease the development time and camera hardware cost more than 50% compared to current solutions with success rates over 95%.

NVIDIA GPU technology revolutionizes the ZENVISION APLR system, with state-of-the-art graphics processors designed to support artificial intelligence.

The ZENTECH video system uses the NVIDIA  RTX or TESLA computing hardware and central server software created using the NVIDIA DeepStream SDK for faster read rates and image processing.

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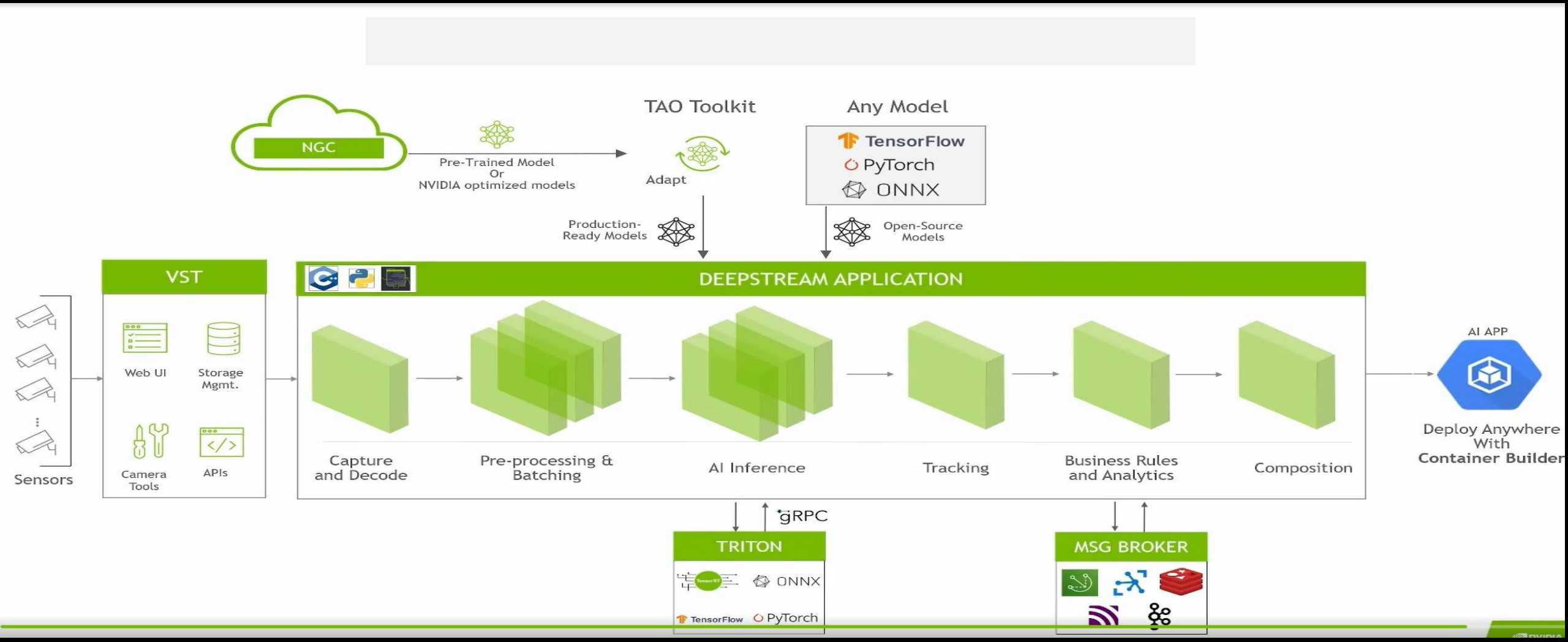
# ZENVISION IVA (Intelligent Video Analytics)

- → ZENVISION demands reliable, real-time Intelligent Video Analytics (IVA).
- → ZENTECH ‘s **vision AI developers use DeepStream** to build IVA apps and services.
- → NVIDIA’s DeepStream SDK delivers a complete streaming analytics toolkit for AI-based multi-sensor processing, video, audio and image understanding.
- → DeepStream offers exceptional throughput for a wide variety of object detection, image classification and instance segmentation based AI models.

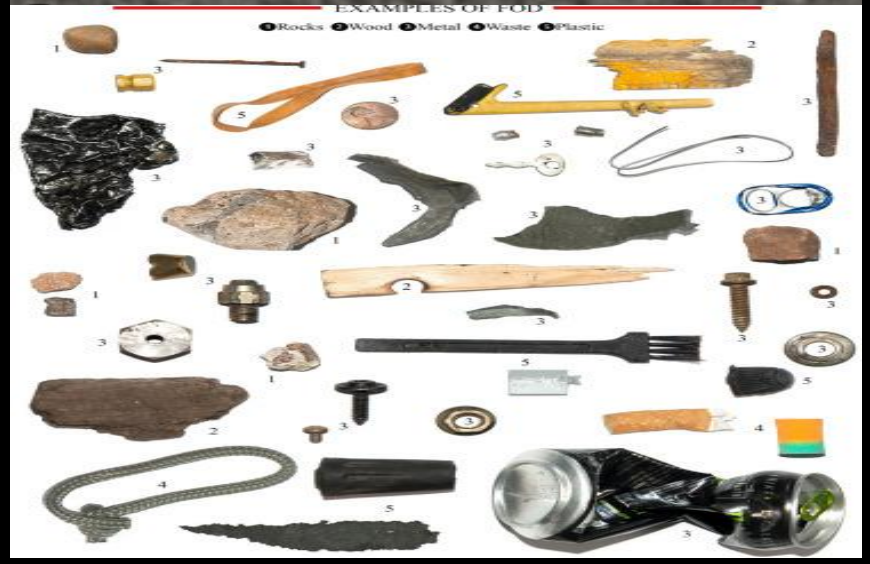
# ENVISION USES THE COMPLETE NVIDIA TOOLKIT



# ZENOMALY Foreign Object Debris FOD

→ It can use existing field devices (eg cameras) avoiding new investments in peripheral equipment, and adding new functionality features to existing security camera networks.

→ ZENVISION video-based recognition eliminates the need for costly feature additions in current AID systems.



# ENVISION ALPR

## Automatic license plate recognition

→ ZENTECH designs, develops, and deploys comprehensive hardware/software solutions for license plate recognition and vehicle identification. As the system integrator of proprietary ALPR imaging hardware and developer of firmware/software analytical engines, the company achieves the optimum synergy to create a very cost effective, reliable, and easily installed ALPR system.

# ZENVISION hazard

→ The ZENVISION Dangerous Goods Signs software is for recognizing and deciphering the hazard identification number (shortly UN number) of commercial vehicles carrying hazardous materials.

→ By reading these codes, traffic monitoring and road safety systems can become highly automated – roads, tunnels and bridges remain safe while transporting dangerous cargo.



ZENVISION

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# UNIQUE SELLING POINTS AND COMPETITIVE ADVANTAGES

1. Very competitive pricing and no hidden costs.

2. Includes complete system integration ( With MMS systems or other ).

3. Option to use existing motorway cameras.

4. Greek targeted customization (Retraining models with Greek Vehicle data—Conforming to Greek laws and guidelines).

5. On site after sales support.