





Traffic & Junction Analysis



Road Violation Enforcement



Roadwork Safety & Productivity

### **Road, Traffic and Roadwork**

# Monitoring, Analysis, and Violation Enforcement

cyRoad Agentic AI Video Intelligence is designed specifically for road and junction traffic analysis, road safety violations enforcement and roadworks compliance. Leveraging the cutting-edge cyVisionGPT engine alongside cyVisionAl analytics, cyRoad empowers land transportation authorities, municipal transportation departments, road operators, traffic police and roadwork owners to efficiently monitor, analyze, and enforce safety and traffic regulations and optimize traffic flow.

### cyVisionGPT

# Human-Like Video Understanding With an Intuitive Copilot and Al Agents

Transcends rule-based video analytics, making intelligence accessible with natural language interaction.

Achieve unparalleled video comprehension through proprietary domain-specific Vision Language Models (VLM) alongside other Vision Al technologies that analyze road and traffic-specific contexts, understand scenes, identify vehicles, persons, interactions and events, through spatio-temporal analysis.

The Agentic Al layer brings a set of Al Agents that automate complex tasks such as generating incident reports, summarizing video footage and automating case management, all instantly available via cynapse.ai Vision Copilot.









Discovery Agent



Q&A Agent



Summarization Agent



**Generation Agent** 



Investigation Agent



# **Automate Enforcement** and Minimize Risk

### **Road Safety Violation Enforcement**

- Driving in Bus Lane
- Driving in the Wrong Lane/Direction
- Illegal Overtaking
- Illegal Parking
- > Illegal Reversing
- > Illegal Stopping
- Illegal Turn
- > Illegal U-Turn
- Illegal Wait / Drop off / Pick Up





- Not Stopping at Pedestrian Crossing
- Not stopping at Stop Line
- Overspeeding
- Red Light Crossing
- Stopping at the Carriageway
- > Stopping or Driving on the Shoulder
- Vehicles Below Minimum Speed in a Fast Lane
- White Line Crossing



# Road & Junction Traffic Monitoring and Analysis

#### **Traffic volume**

Average speed, directional count, congestion, queue length, wait time

#### **Vehicles**

Counting, classification, lane, direction, path, speed, LPR

#### **Pedestrians**

Counting, gender & age, lane, direction, path, grouping, crossing

#### **Micromobility devices**

Counting, classification, lane, direction, path, speed, rider gender & age, helmet, LPR

#### **Incidents**

Abnormal events, accident events, near-misses events, non-compliance events



# **Roadwork** Safety Enforcement and Productivity Monitoring

#### **Increase Road Safety**

- > Barricades and Cones Compliance
- > Worker PPE Compliance

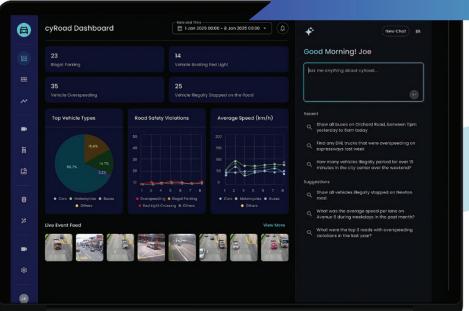
#### Minimize Impact on Traffic Flow

> Congestion and Slow Traffic in Lane

#### **Maximize Productivity**

- Work Start/End Time
- Worker Counting

The cyRoad dashboard delivers a comprehensive view of video intelligence, with quick access to insights and events through an interactive copilot



### Why cyRoad?

**Key Advantages** 



Powered by Agentic Al



Revolutionary Video Understanding



User-Defined Events



Works With Any Video/Visual Source



Vision Copilot with Al Agents



**Edge/On-Prem/Cloud** 

### about cynapse.ai

cynapse.ai is a leading provider of Verticalized Agentic Al Video Intelligence solutions, enabling organizations to enhance safety, security, compliance and operational efficiency. cynapse.ai solutions are designed to detect and respond to risks, threats, and violations while uncovering opportunities across smart cities, transportation, seaports, airports, and correctional services. Offering human-like video understanding through cyVisionGPT and 150+ pre-defined analytics, and turning it into everyday value through Al Agents and an intuitive copilot, cynapse.ai is making video intelligence more powerful and accessible than ever before.

