





Traffic Analysis



Lane Safety



Violation Enforcement

## **Micromobility**

# Traffic Monitoring & Violation Enforcement

cyMicromobility is designed for urban micromobility traffic analysis, anomaly detection, and safety violations enforcement. It empowers city transportation departments, municipal authorities, and traffic operators to enhance road safety and optimize traffic flow in bicycle lanes and roads. By automating the detection of risky behaviors, violations, and anomalies involving micromobility devices, it ensures a safer environment for all road users while supporting better urban planning and sustainability.

### cyNeuron

## 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 city-specific contexts, understand scenes, identify persons, vehicles, objects, 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



## **Micromobility**

## **Traffic Monitoring & Analysis**

#### **Micromobility Traffic**

- Total/Average Count per Segment/Street/Lane
- Max/Average Speed per Segment/Street/Lane
- Travel Time per Segment/Street/Lane
- > Heatmap & Reports

#### **Pedestrians**

- Counting
- > Gender & Age
- Lane
- > Direction
- > Path
- > Anonymization

#### **Micromobility Device**

- Classification
- Lane
- > Direction
- > Path
- > Speed
- > Rider Gender & Age
- Helmet
- > LPR
- Rider Anonymization



# Bicycle Lane Anomaly Detection

cyMicromobility provides continuous monitoring of risks and hazards to ensure safe and smooth rides for lane users.

- Object/Hazard Blocking the Lane
- > Crowd Blocking the Lane
- > Fallen Rider
- > Motorcycle in Lane
- Unauthorized Vechicle in Lane





cyMicromobility transforms road safety and compliance with automated micromobility violation detection and enforcement.

#### **Safety Violations**

- Riding in Wrong Lane/Direction/Road
- Over Speeding
- > Riding without Helmet
- > Riding with No Light
- > Pillion Riding
- > LPR

The cyMicromobility dashboard offers a comprehensive view of video intelligence, providing quick access to insights and events of interest



## Why cyMicromobility?

**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 AI 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 cyNeuron and 150+ pre-defined analytics, and turning it into everyday value through AI Agents and an intuitive copilot, cynapse.ai is making video intelligence more powerful and accessible than ever before.

