



# Drop-In Computer Vision For Optical Sensors

Turn Traditional Surveillance Video Into Real-Time Aerial Object Intelligence—Without Replacing Your Existing Cameras.

Our computer vision (CV) system integrates as a drop-in layer for existing optical sensors and surveillance cameras, including commercial PTZ (Pan-Tilt-Zoom) platforms. By streaming live video directly into our CV pipeline, we enable real-time detection, classification, and tracking of aerial objects, reducing reliance on manual monitoring and derisking human operator error.

## Key Capabilities

### DROP-IN INTEGRATION WITH EXISTING CAMERAS

Add AI to deployed optical sensors with minimal changes to current infrastructure.

### AUTOMATED AERIAL OBJECT DETECTION

Identify aerial objects of interest in challenging conditions (small, distant, fast-moving targets).

### PERSISTENT MULTI-TARGET TRACKING

Maintain object tracks over time for stable monitoring and situational awareness.

### EVENT OUTPUTS FOR ALERTING & CUEING

Produce machine-readable detections/tracks (timestamped, confidence-scored) for downstream systems, enabling tipping and cueing of other sensor modalities and alerting mobile networks (CROSINT/TAK).

### REAL-TIME VIDEO INGEST FROM PTZ SYSTEMS

Stream live video from commercial PTZ cameras into our CV stack for immediate analysis.

### CLASSIFICATION FOR OPERATOR PRIORITIZATION

Categorize detections to reduce false alarms and highlight potential threats.

### REDUCED OPERATOR ERROR AND WORKLOAD

Automate continuous scanning to mitigate fatigue-driven misses and inconsistent interpretation.

### FLEXIBLE DEPLOYMENT

Support edge or cloud processing depending on latency, network, and site constraints. (Edge deployment may require extra hardware attachments)

## Applications

- Counter-UAS early warning using a combination of existing camera systems enhanced with CV, multi-modal sensors, and Anomaly Federal mobile networks
- Perimeter security and facility protection for critical infrastructure and sensitive sites
- Airspace monitoring around events, campuses, industrial complexes, and restricted areas