



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