AXOLTL
Our Expertise, Your Competitive Edge

IRIS™

Harnessing the Power of AI

The Interactive Rapid Intelligence System (IRIS) transforms computer vision capabilities by seamlessly integrating real-time learning and customer-driven domain expertise. Our platform addresses the challenges of detecting specialized objects in diverse scenarios, enhancing operational flexibility and accuracy.

AXOLTL LLC leverages a modular, containerized approach to provide a low-code/no-code option for operators to connect data, models, and visuals. IRIS is easily integrated into existing architecture and provides API access, allowing for seamless integration with other programs and systems.

FEATURES

Advanced Object Detection & Tracking:

- Combines multiple modeling strategies (e.g., YOLO, OWL, SAM)
- Adapts to novel situations with limited or unavailable training data
- Enables real-time discovery and curation of new objects of interest through user selection, detection modifications, and annotations

Automated Learning Pipeline:

- Object similarity comparison through panoptic segmentation combined with Siamese Neural Networks
- Continuous model retraining and deployment supported by model experiment tracking and evaluation

USE CASES

Defense & Military Operations:

- Tactical Reconnaissance
- Border Security
- Search and Rescue Operations
- Autonomous Vehicles
- Counter-UAS

Commercial Applications:

- Medical Imaging Analysis
- Inventory Management
- Security and Surveillance
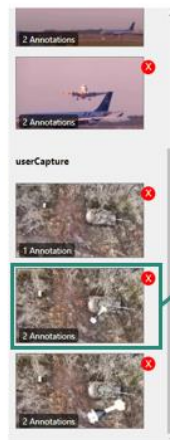- Environmental Monitoring