

# Modernizing Airport Operations

With Visual Intelligence



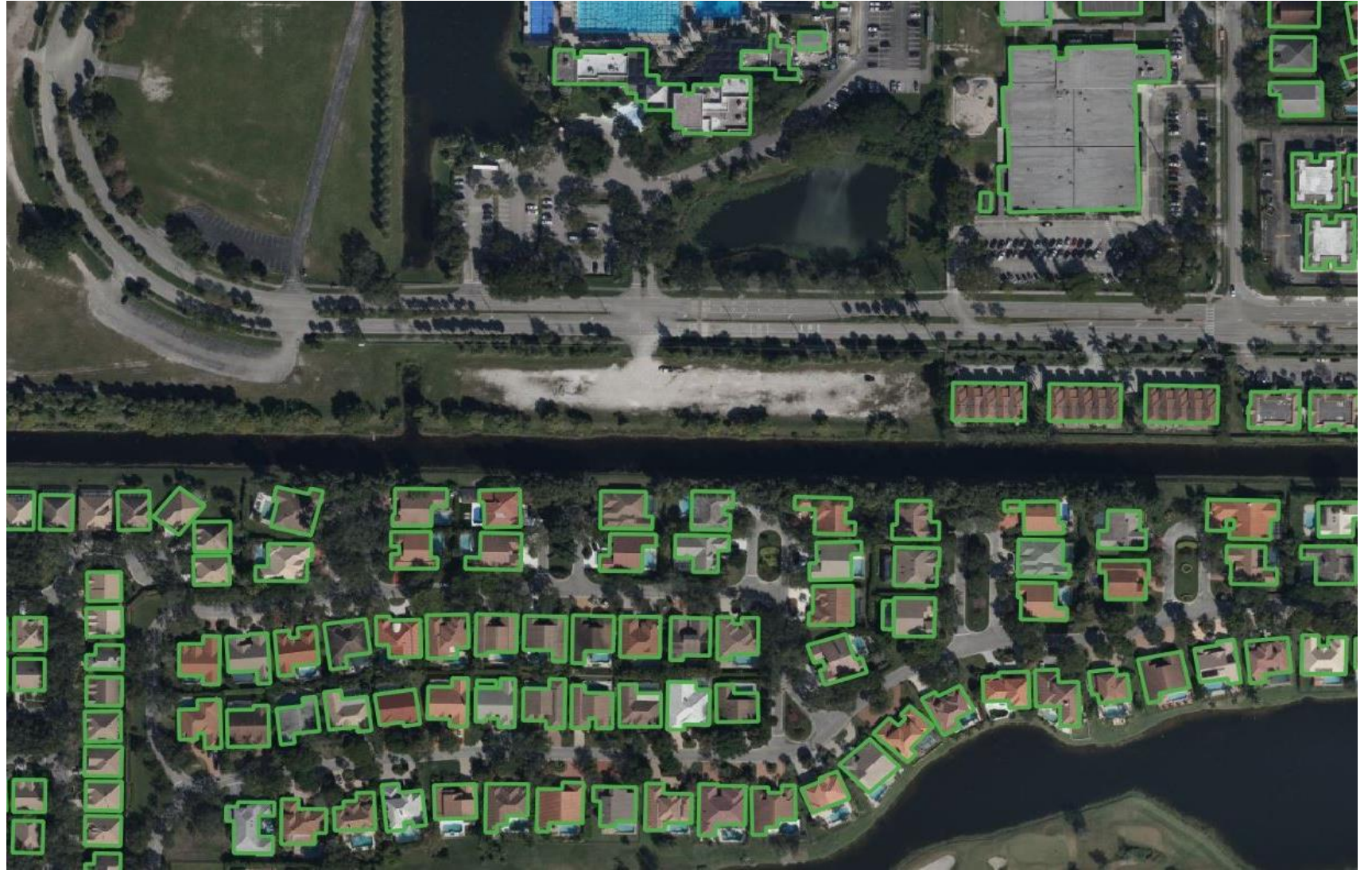
Presented by Arun Narayanan  
President of Datalytix





# Innovation Expertise

Remotely identify,  
monitor, and quantify  
construction activity  
using **Satellite Imagery**







# ClariVision

Computer Vision  
Solution

*Sky to Ground Intelligence*



# ClariVision

*Sky to Ground Intelligence*

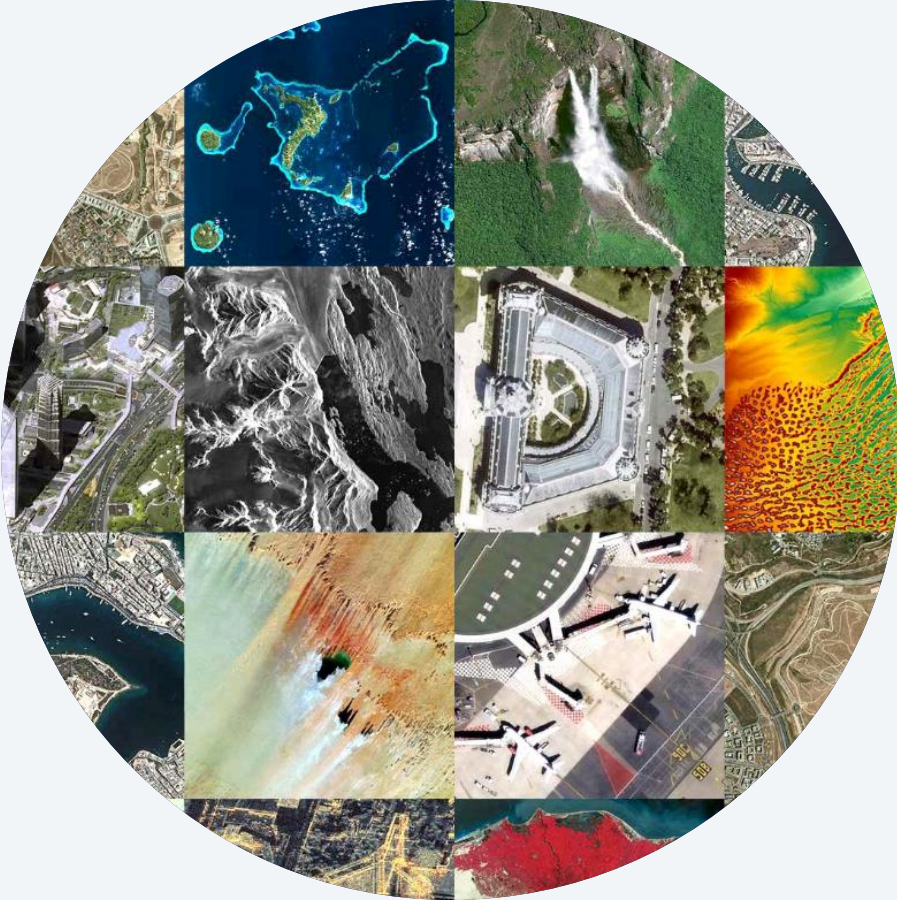
- ClariVision by Datalytix is an AI-powered, computer vision platform
- Solution combines aerial imagery, ground sensors, and custom data to provide real-time insights across industries
- Platform streamlines data collection, analysis, governance and decision-making
- Unify sky-to-ground intelligence to help organizations track progress, enhance security, ensure compliance, and optimize operations





# ClariVision

Sky to Ground Intelligence



- One-Stop Solution

Eliminate complexity with our comprehensive, end-to-end platform

- Multi-Level, Multi-Modal Vision AI

Situational awareness integrating both aerial and ground data

- Customizable & Scalable

Pre-built platforms and custom add-ons accelerate deployment and optimize costs



# Visual Intelligence for Airport Operations



## People Monitoring & Safety

- Passenger & Terminal Monitoring
- Airside Safety
- Construction Workforce Safety



## Security & Access Control

- Restricted Area Surveillance
- Smart Identity Recognition
- Perimeter & Wildlife Monitoring



## Operational Efficiency & Situational Awareness

- Airside & Landside Operations
- Construction Progress Monitoring
- Emergency Response



## Infrastructure Health & Maintenance

- Runway & Tarmac Inspection
- Lighting & Signage Monitoring
- Maintenance Activity Oversight



Proactive  
Safety



Regulatory  
Ready



Cost  
Reduction



Workforce  
Efficiency

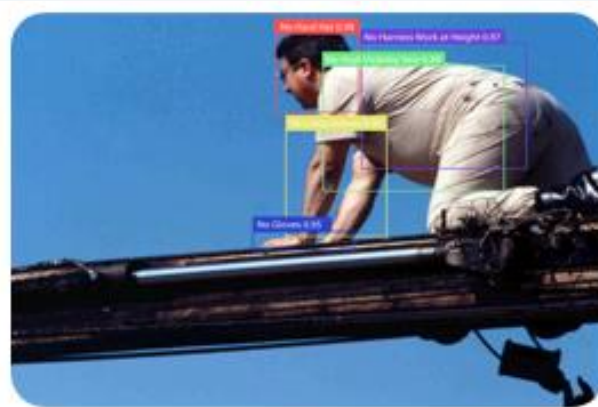


# ClariVision Use Cases

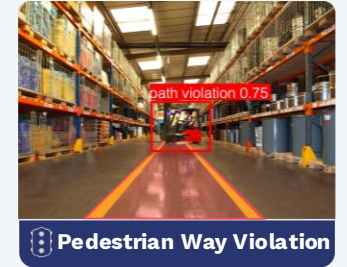
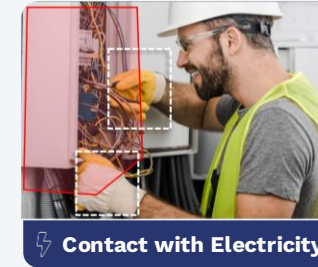
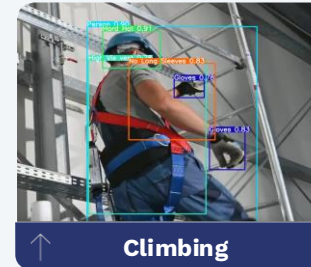
Safety, Security & Operational Intelligence *Powered by Fogsphere*



## PPE Monitoring



## Behavioral Safety



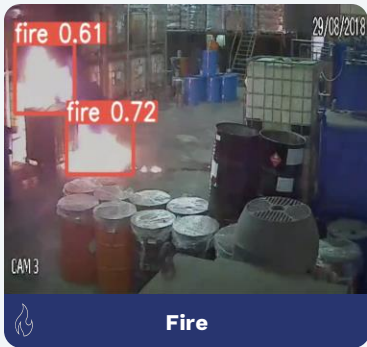


# ClariVision Use Cases

Safety, Security & Operational Intelligence *Powered by Fogsphere*



## Emergency Management



Fire



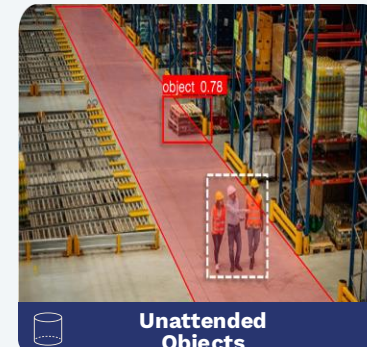
Fire & Smoke



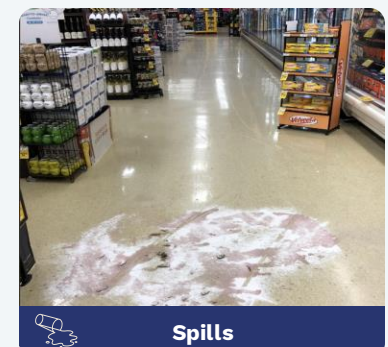
## Housekeeping



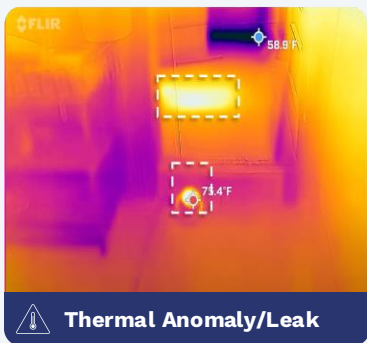
Cardboard Box Detection



Unattended Objects



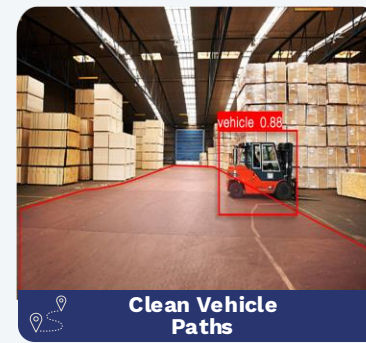
Spills



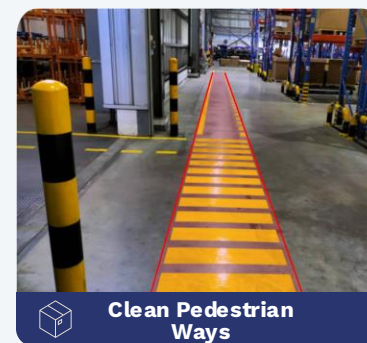
Thermal Anomaly/Leak



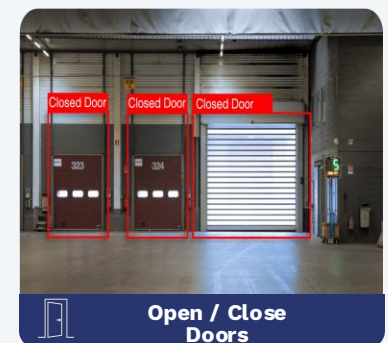
Worker Down



Clean Vehicle Paths



Clean Pedestrian Ways



Open / Close Doors



# ClariVision Use Cases

Safety, Security & Operational Intelligence *Powered by Fogsphere*



## Vehicle, Road, and Runway Condition Monitoring

6



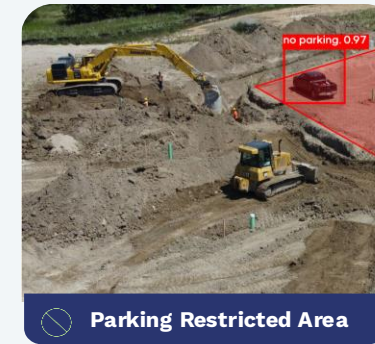
Vehicle Speed



Vehicle Counting



Parking Direction Restriction



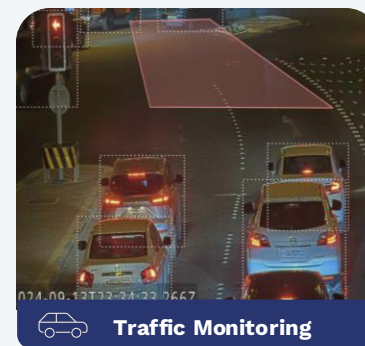
Parking Restricted Area



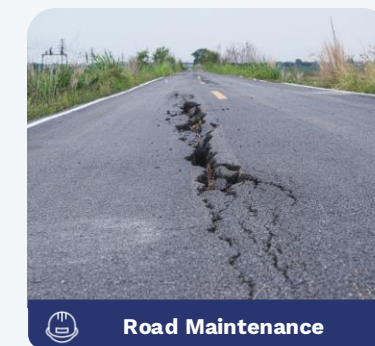
Person-Vehicle Distance



Weight Load Hazard



Traffic Monitoring



Road Maintenance



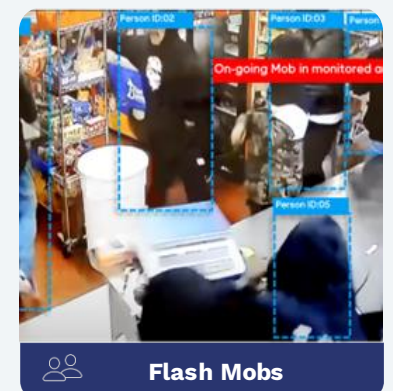
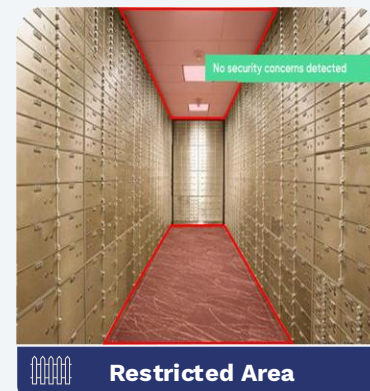
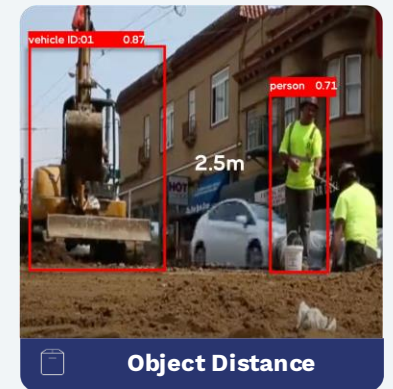
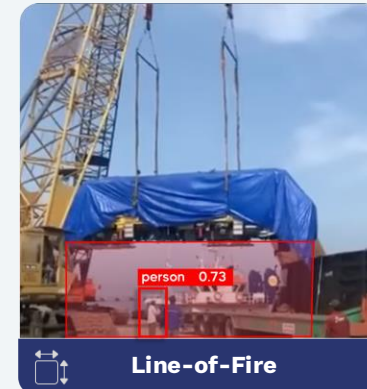
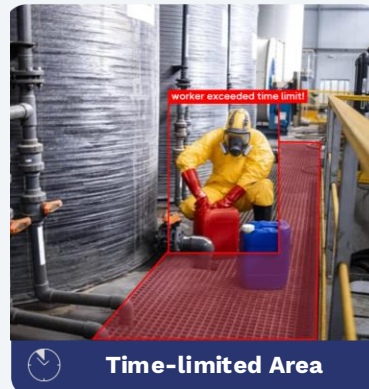
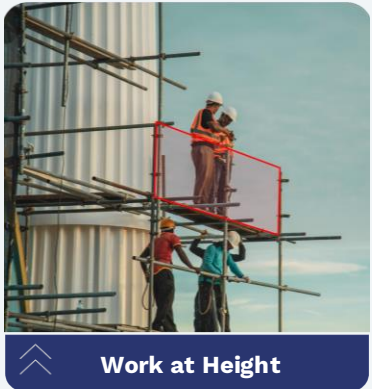
# ClariVision Use Cases

Safety, Security & Operational Intelligence *Powered by Fogsphere*



## Area Controls – Area Safety & Security

6





# Integrated Technology Stack



## AI Vision

Smart Cameras with ML  
Detection



## IoT Sensors

Environmental &  
Equipment Data



## Spatial Intelligence

Drone & Satellite Feeds



## Command Center

Unified Operations  
Dashboard



# Incident Response

*Real-Word Example: Reduced Visibility, Fuel Spill, Security Breach, PPE Violation*

## Traditional Response Limitations

- Delayed Discovery
- Fragmented Communication
- Manual Documentation
- Resource Conflicts

## Integrated Intelligence Response

- AI Vision Detection
- Intelligent Prioritization
- Coordinated Dispatch
- Auto-Documentation



# ClariVision

## Solution Components



### Data Acquisition

Our capabilities combine satellite imagery, CCTV cameras, sensors, and structured/unstructured data.



### Data Services

We provide pre-built AI models, custom workflows, event tracking, and enterprise integration support.



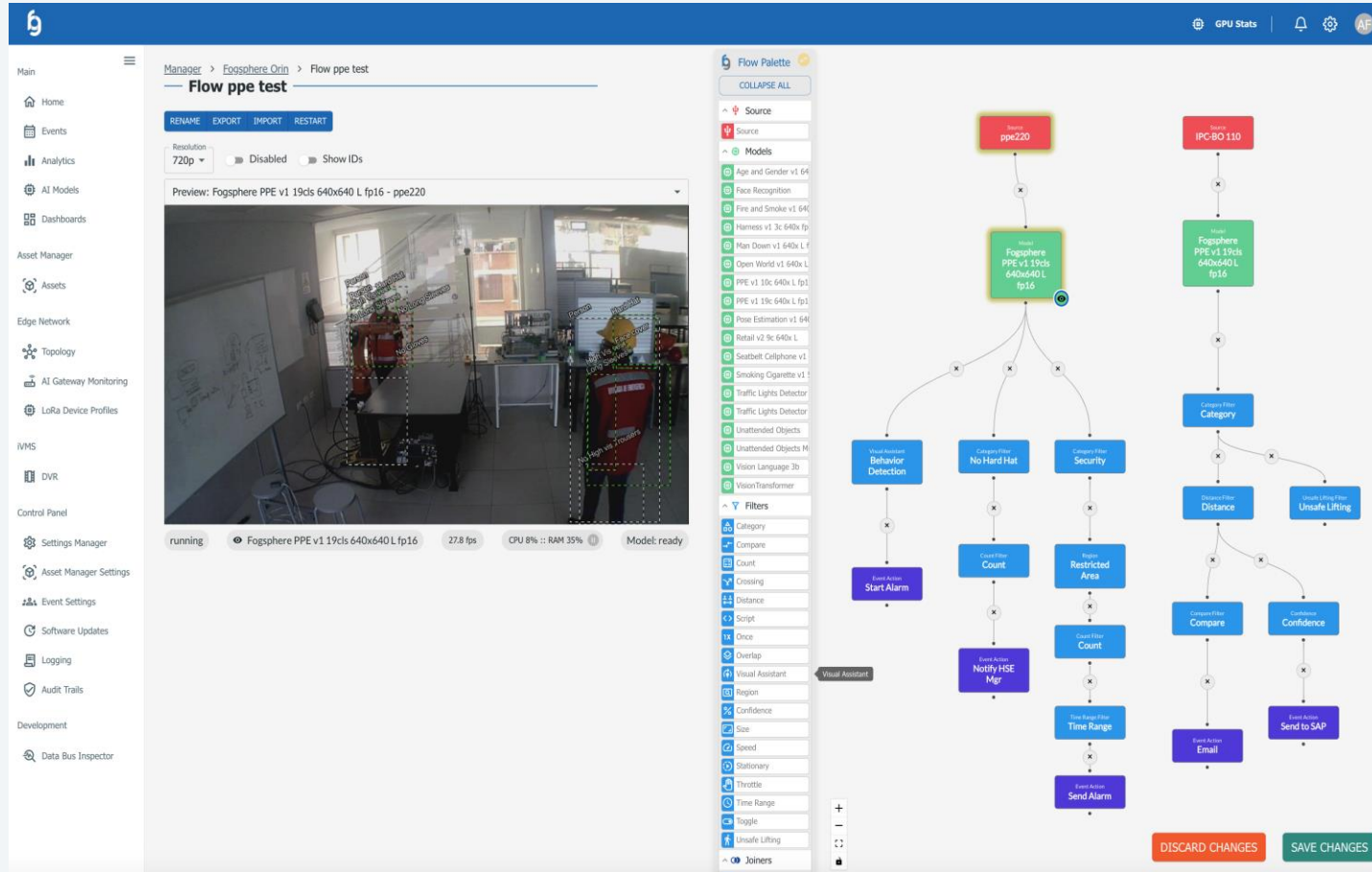
### AI Governance

Solution incorporates start-to-finish AI governance to enhance risk management and compliance.



# ClariVision Platform

## Powerful No-Code Workflows



Connect to **any CCTV camera** or **VMS** with a single click

**Drag & Drop** your **AI Model** of choice

Add an **off-the-shelf** or **custom filter** or **algorithm**

Add an action to **Log data**, **send Alarms**, make **API Calls**, or create **Reports** and **Analytics**

Create **one or more Flows** to implement your processes



# ClariVision: Built for Compliance

FAA, MAA, State/County-Level Requirements

Requirement	How It's Addressed
Runway Safety / Incursion Alerts	Smart cameras & AI detect and alert on real-time violations
Wildlife Hazard Management	Computer vision flags wildlife presence with location and timestamp
Spill Detection & Environmental Reporting	IoT sensors + video evidence automatically logged for audits
Safety Management System (SMS) Readiness	Data-driven dashboards support hazard analysis & safety metrics
Incident Documentation & Audit Trails	Time-stamped video, geotagged alerts, and resolution logs
Perimeter Zoning & Obstruction Tracking	Drones + satellite imagery support land use monitoring

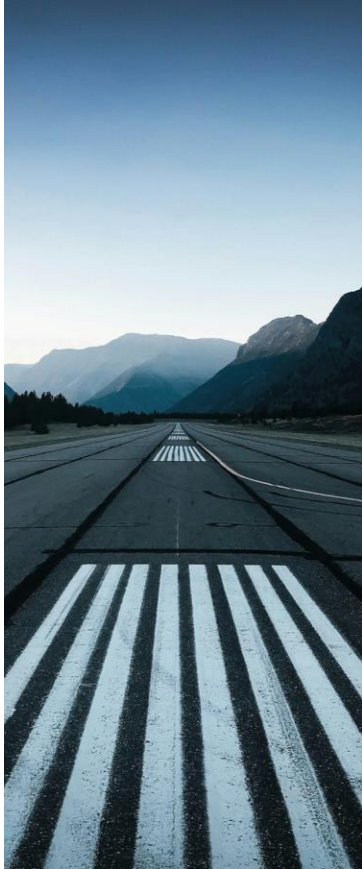
*Proactive Compliance, Audit-Ready, & Low Overhead*



# ClariVision: Enterprise Value



People & Safety



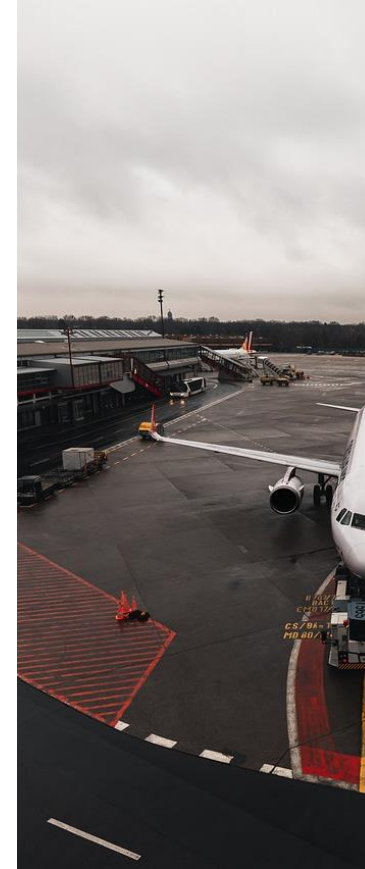
Infrastructure



Security & Access



Compliance & ROI



Operations



Sustainability





DATALYTIX

# Real-time Demo



# Let's get started

 [www.datalytixglobal.com](http://www.datalytixglobal.com)

 [info@datalytixglobal.com](mailto:info@datalytixglobal.com)







# Appendix



# ClariVision Use Cases

ClariVision's holistic approach empowers organizations to rapidly detect opportunities, mitigate risks, and drive smarter decisions in real-time.



Progress Tracking



Accident Detection



Safety Compliance



Vehicle Monitoring



Security Controls



Disaster Recovery



PPE Monitoring



Behavioral Monitoring



ClariVision

# Relevant Industries

Aviation

Construction

Disaster Relief

Utilities

Manufacturing

Schools

Agriculture





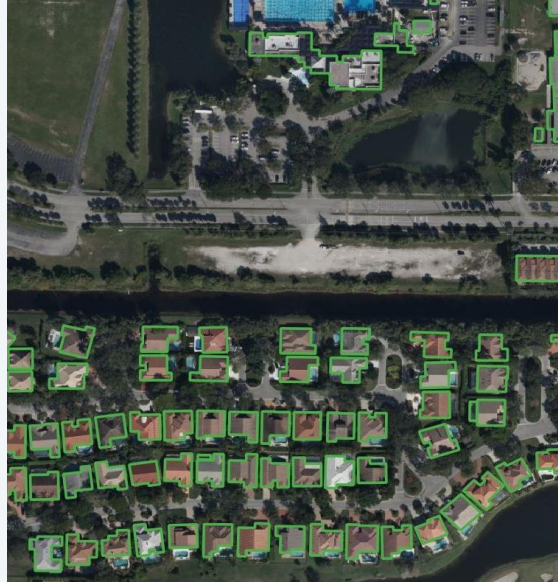
# ClariVision Use Cases

## Aerial Intelligence



### Urban Planning

Analyzing urban development patterns and infrastructure using satellite data to inform city planning



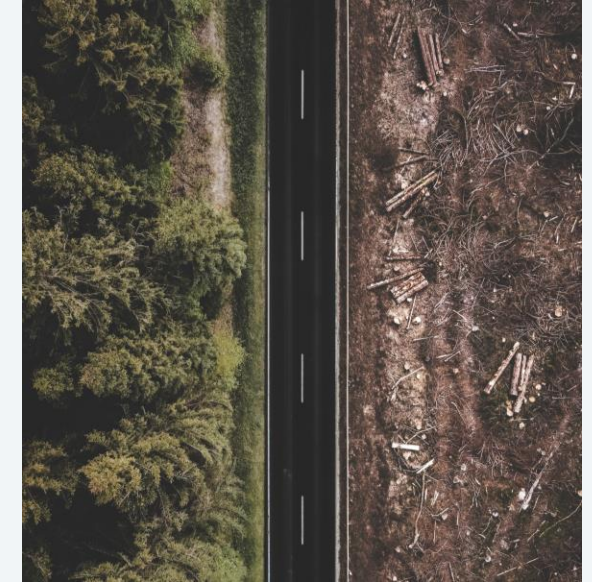
### Building Classification

Identifying buildings and classifying structures for economic indicators, public surveys, and progress tracking



### Disaster Response

Leveraging satellite imagery to assess the impact of natural disasters and coordinate relief efforts



### Environmental Monitoring

Tracking deforestation, water quality, and other environmental indicators using satellite data