



AI-DRIVEN DIGITAL COVERAGE

THE CHALLENGES OF GOING SMART

High TCO & Deployment time

- Place to install (Real-estate)
- Backhaul connectivity (from far-edge)
- Stable and continuous AC power

Fragmentation & Poor experience

- Multiple vendor approach leads to non-flexible and non-interoperable solution
- Aesthetics (antennas, cameras)
- Low dense sensor deployment doesn't fit AI requirement



AI-DRIVEN DIGITAL COVERAGE

Juganu brings a breakthrough solution, technological and financial, solving the challenge of digitizing public spaces with AI services.



Juganu by the numbers

2011

Founded

400K+

Smart units deployed

100M+

Sqm of smart lighting

100+

Countries exposure

67

Registered patents in lighting
and networking and AI

Selected by
global giants



Wireless platform. Overnight installation.

Distributed edge AI



Leveraging streetlight grid for distributed edge AI

Network Access



5G/Public Wifi Wireless backhaul and IoT hub

Smart lighting



Enhanced energy efficiency and lighting quality

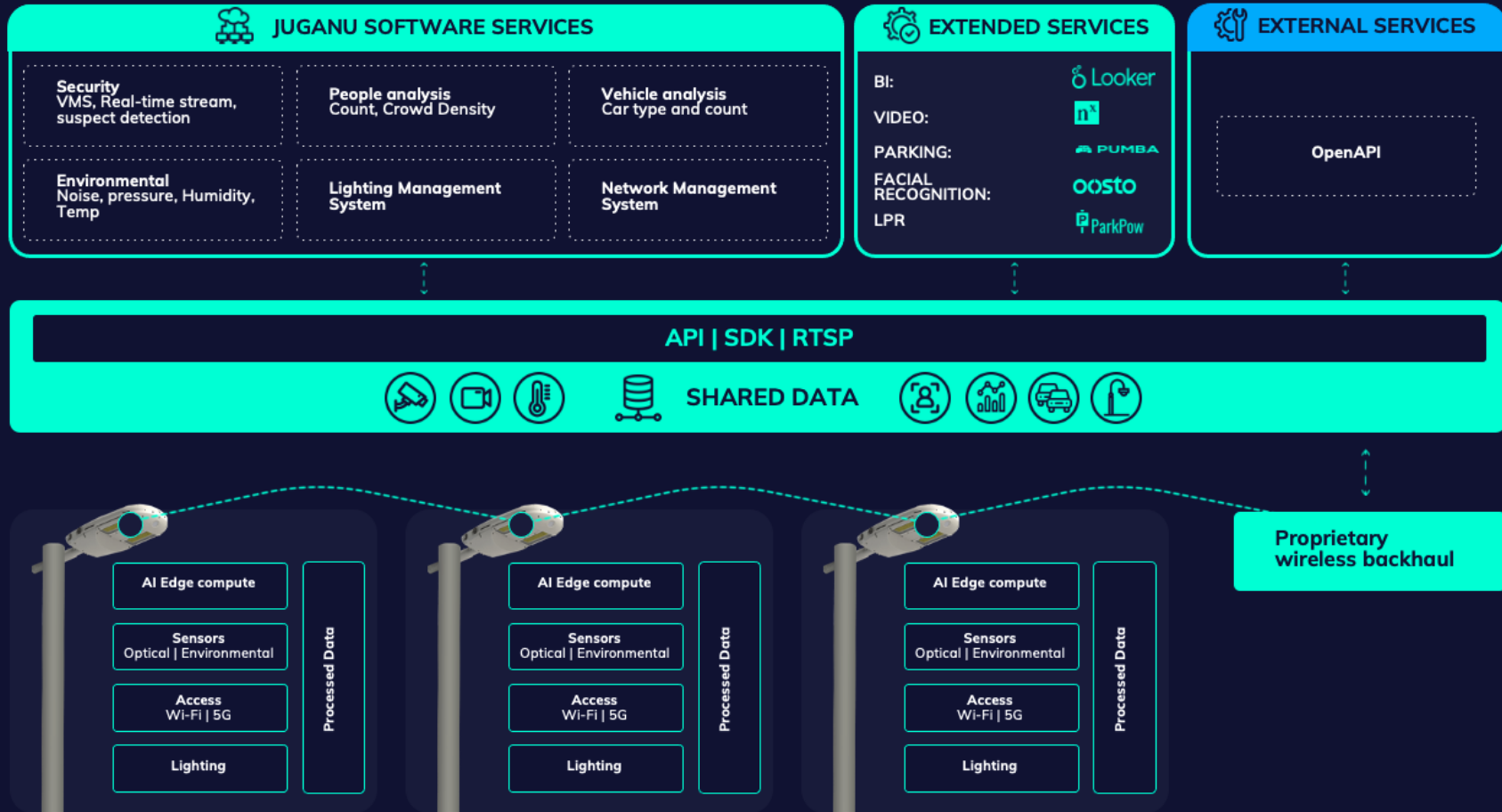
AI Applications, Analytics, and Actionable insights



Full flexibility of using data for monetization



Platform Landscape



Use Cases



Sustainability

Up to 80% savings in power consumption

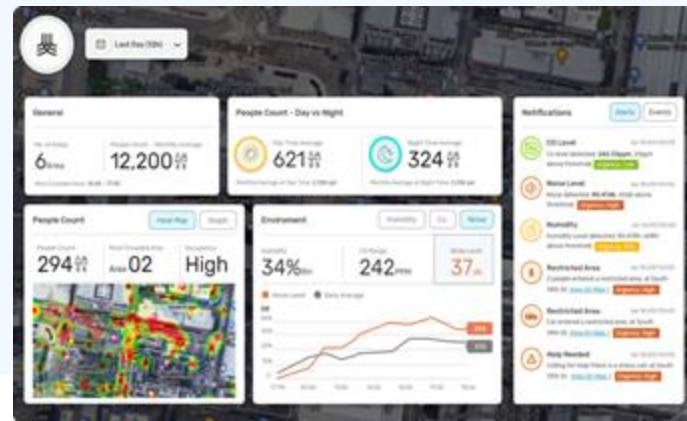
Reduce carbon emissions

Less materials

Smart City

Advanced, Connected and Safe City

- **Access:** Public WiFi/5G network – High QoS everywhere in the city
- **Security:** Real-time video stream, VMS, Pinpoint suspicious activity
- **Data:** People analysis, Count, Density
- **Traffic:** Vehicle and traffic analysis
- **Lighting:** Superb Controlled lighting – energy savings and high-quality illumination
- **Environmental sensors** – measurement of air quality, humidity and noise level
- **Real-time alerts**



AI-Driven Digital Coverage As a Service

The Platform Benefits

- **Real-time processing and Reduced Latency**
Juganu brings AI closer to data, speeding up processing and enabling real-time responses.
- **Enhanced Privacy and Security**
Edge processing mitigates privacy concerns by analyzing sensitive data locally, minimizing breaches or unauthorized access.
- **Reduced Bandwidth Requirements**
Juganu optimizes AI load by transmitting processed data, solving bandwidth and cost constraints.
- **Cost Efficiency**
Juganu reduces costs by enabling local AI processing, minimizing reliance on expensive cloud infrastructure and data transfer expenses.
- **Flexibility and Customization**
Juganu enables integration and customization of 3rd party AI applications tailored to diverse needs.



Unified Platform

Lighting & Control

Multi-level wireless backhaul

Distributed far-edge AI & 4D AI

Video / Audio & Environmental sensors

IoT / CV2X

Public/Private access 5G SC/WiFi AP

Application framework

Apps



AI based applications
Analytics and BI
API / SDK



Cloud / on-Prem BE /

Public ISP/5G-Core



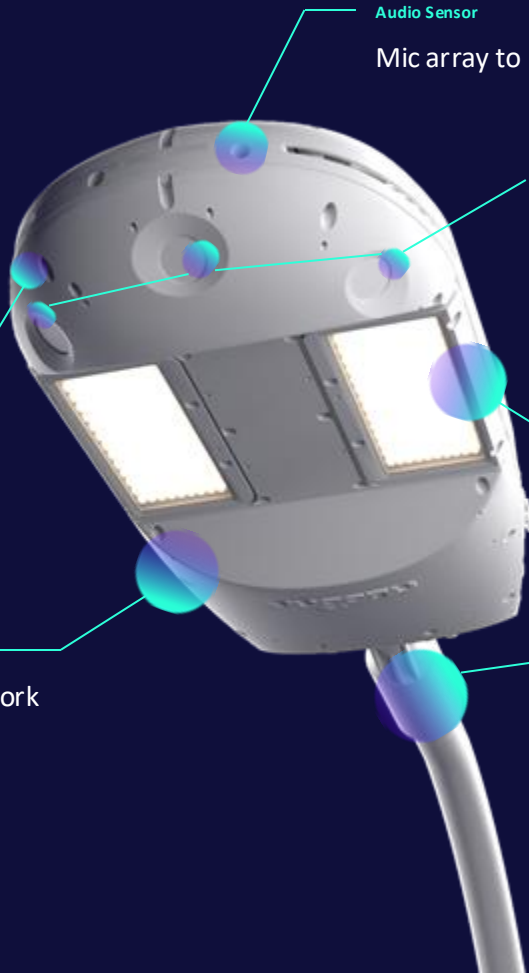
Bubble

Level 1+2

Juganu Wireless backhaul

Juganu's revolutionary technology

The Components



Audio Sensor
Mic array to point origin

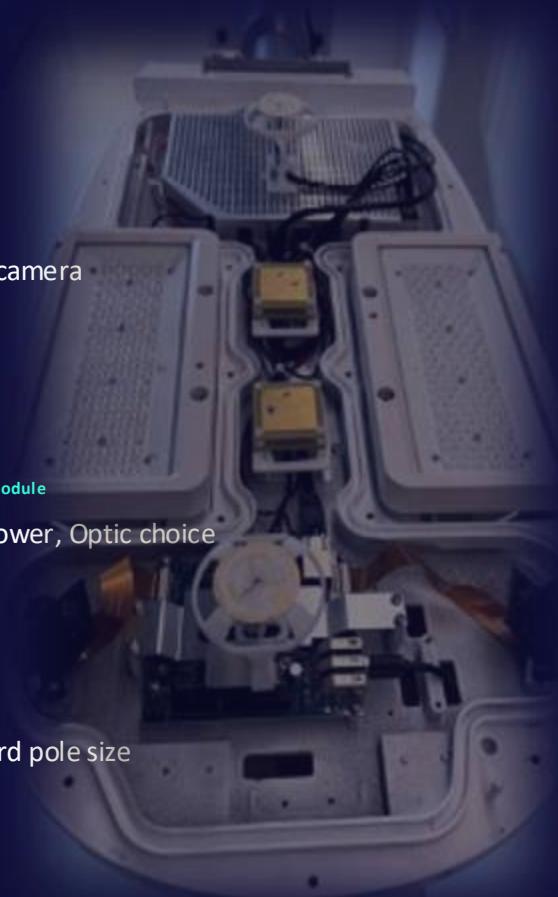
Optical Sensor
High-res video camera

Environmental Sensors
Temp, Pressure, Humidity,
AQI

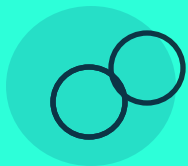
Lighting Module
LED, Power, Optic choice

Wireless backhaul + 5G/WiFi access network
Full duplex proprietary wireless network
Sophisticated access Wi-Fi 11.ac/ax
IoT Hub – multi-protocols

Mounting
Standard pole size



Juganu offering



Edge Processing

Optimal coverage to extract data for AI and BI processing



WiFi/5G coverage

Access point, Public Wifi



Wireless Mesh Infrastructure

with cameras and sensors that are designed for minimal install and setup efforts



Lighting and Lighting control

High quality and energy saving lighting



Actionable Insights

Based on real time data, we improve security and streamline the management of outdoor spaces

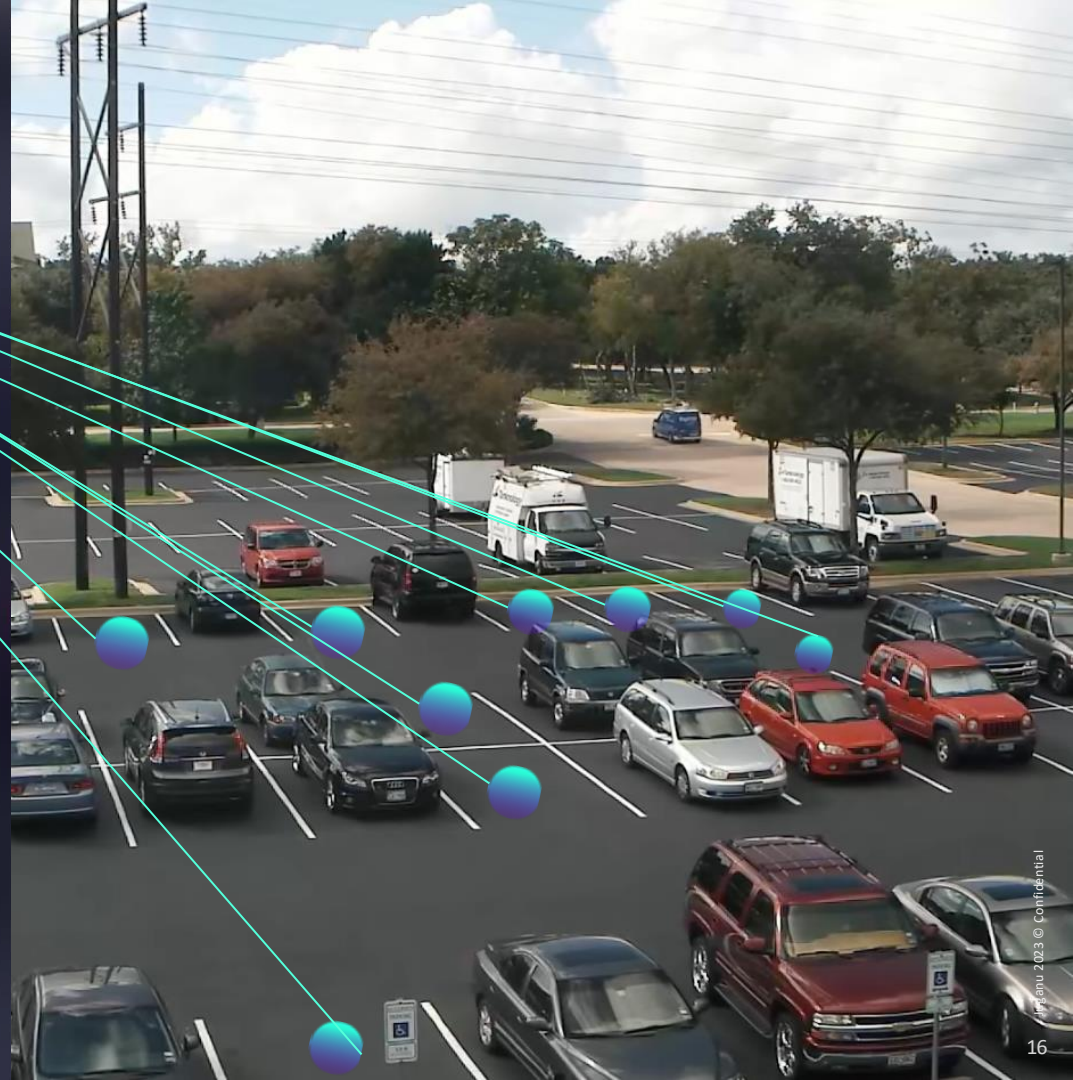
A market-ready, comprehensive solution using AI, lighting and computer vision to deliver next-gen analytics and services for public spaces

Use Cases

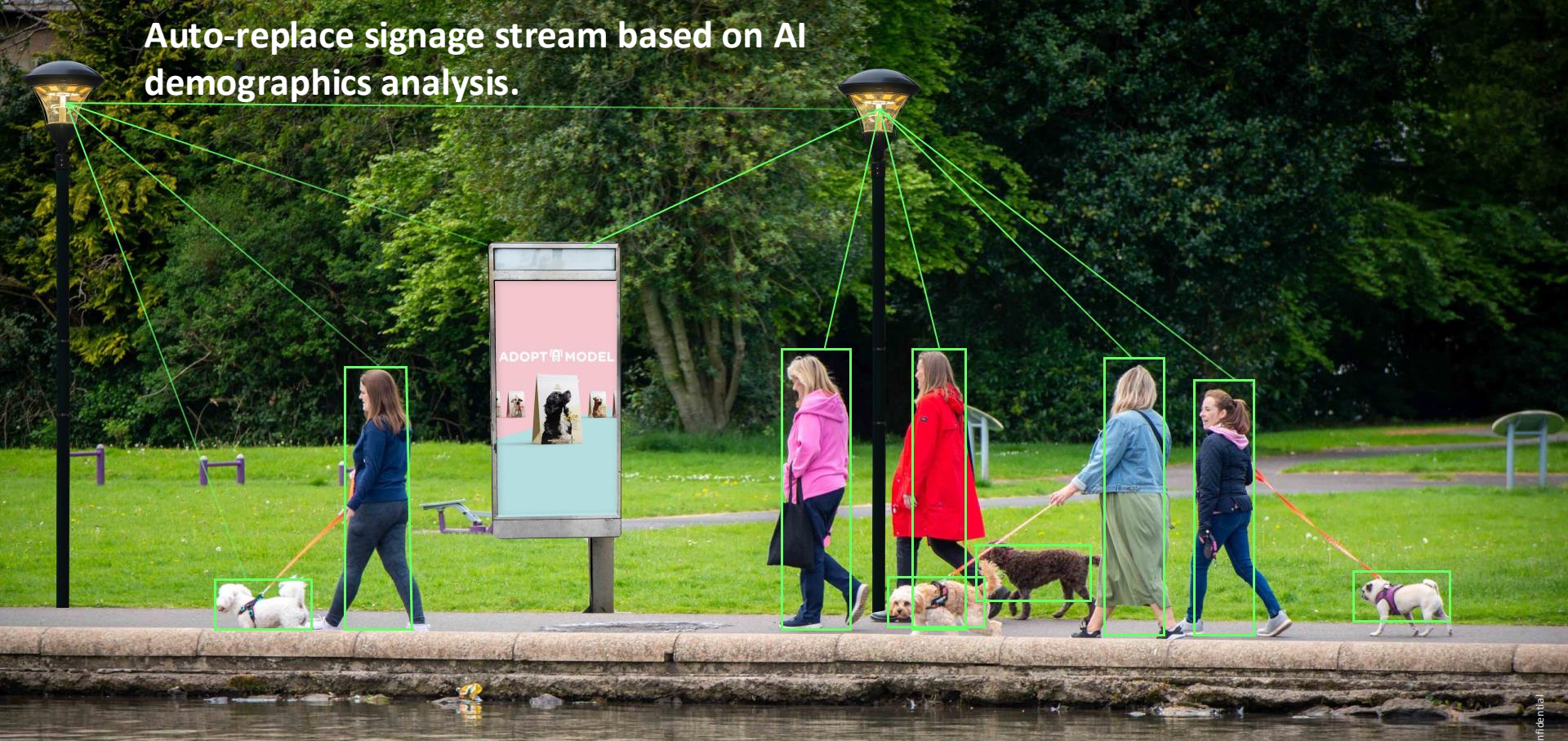
Smart city



PARKING MANAGEMENT FROM THE POINT OF LIGHT



Auto-replace signage stream based on AI demographics analysis.



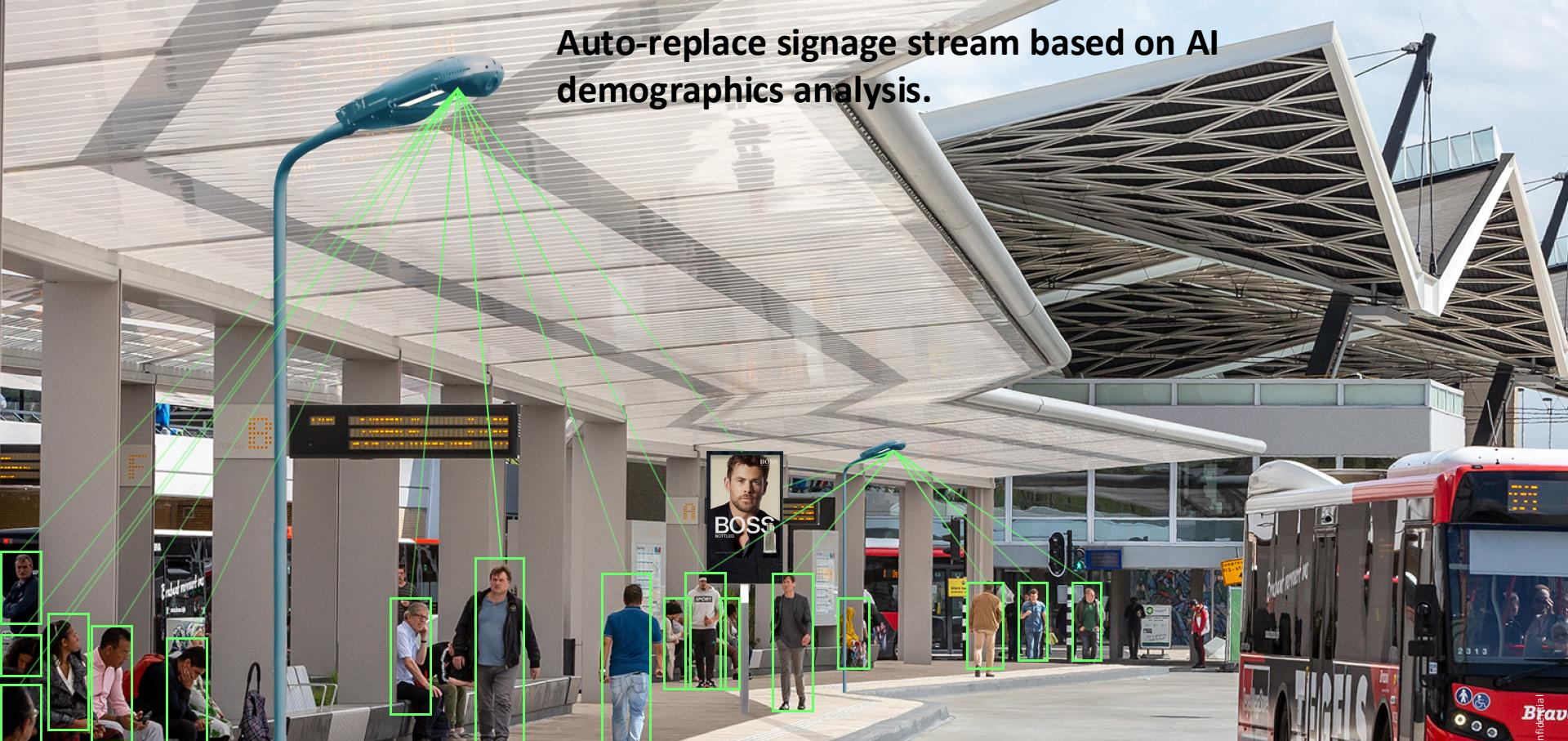
1. Wireless network in the park

2. Demographic analysis

3. Dogs (object) detection

4. Digital signage shows pet food advert

Auto-replace signage stream based on AI demographics analysis.



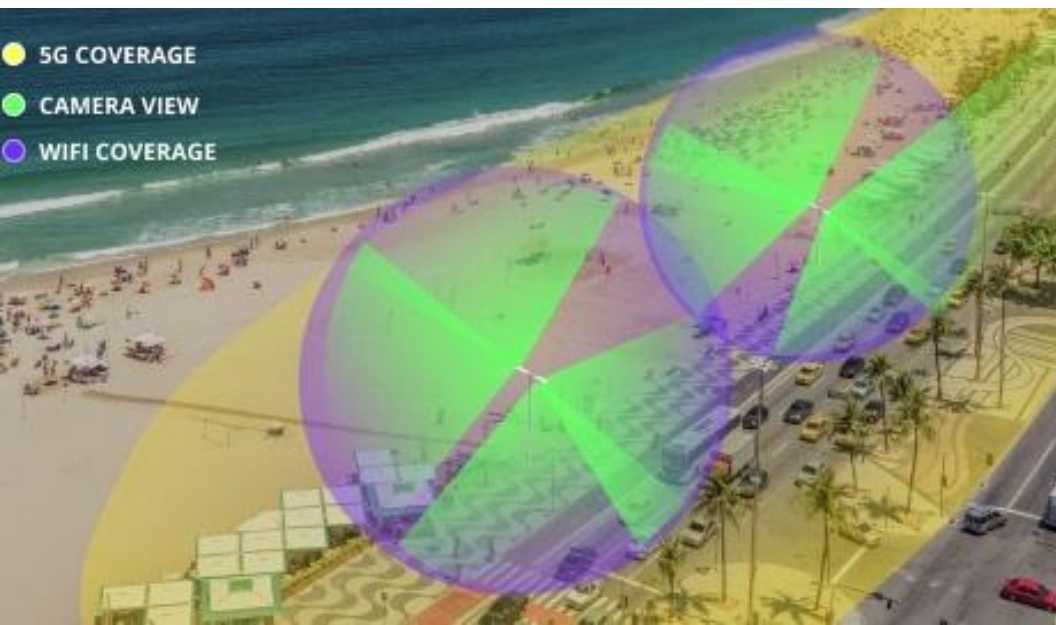
1. Wireless network in a bus station

2. Demographic analysis

3. Digital signage shows men's advert

Digitizing Copacabana

From energy savings to endless smart services



Smart City

Pato Branco, BR



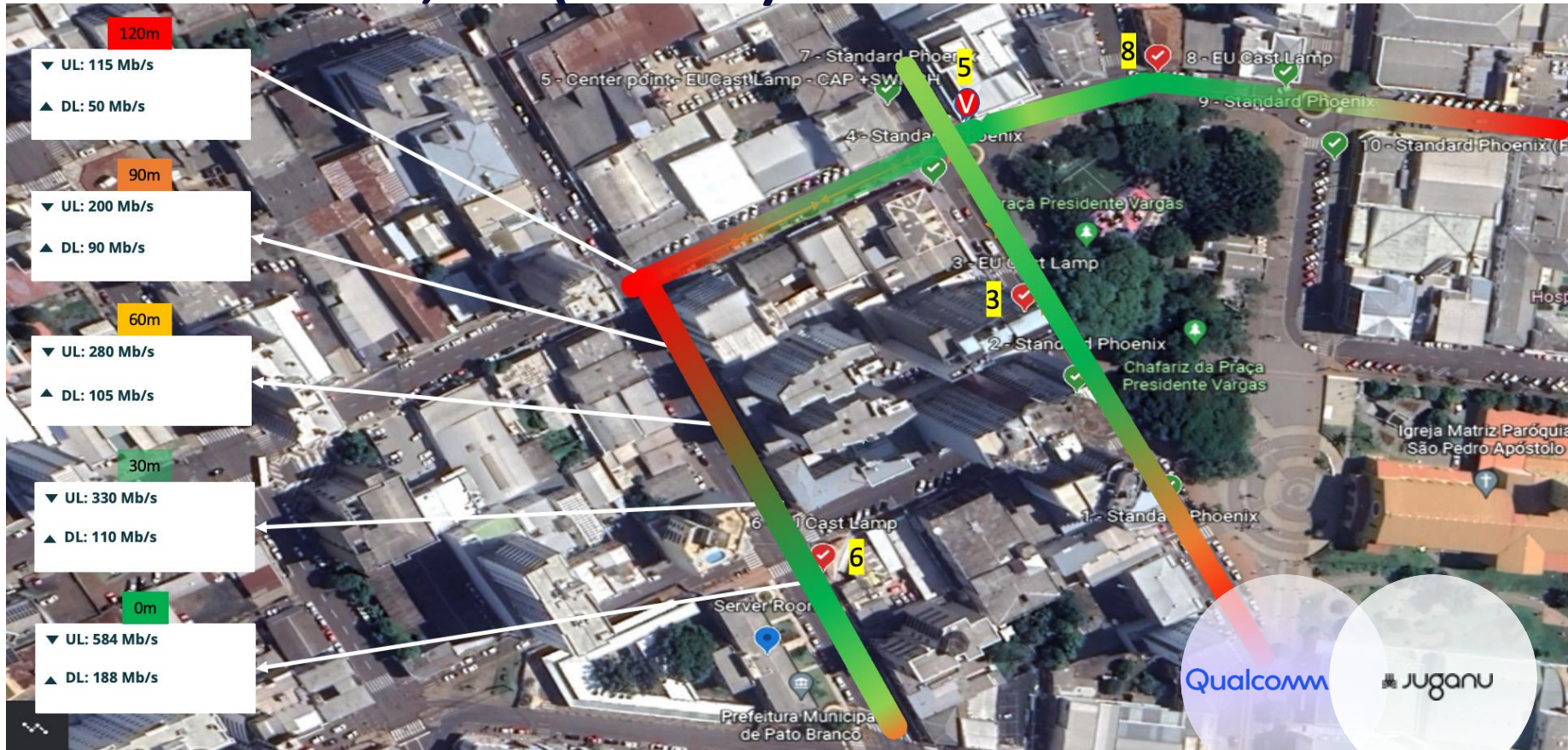
Qualcomm

Juganú

- Lighting
- 5G
- Public Wifi
- Security camera
- AI and edge compute



Pato Branco, BR (results)



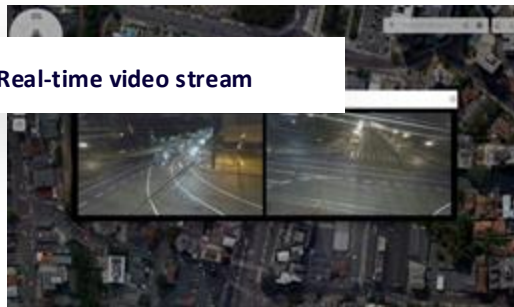
Smart lighting + 5G + Wi-Fi + Traffic management + Street analytic

Curitiba, Brazil

People Density



Real-time video stream



Noise level monitoring



5g (small cell) coverage



Wifi coverage

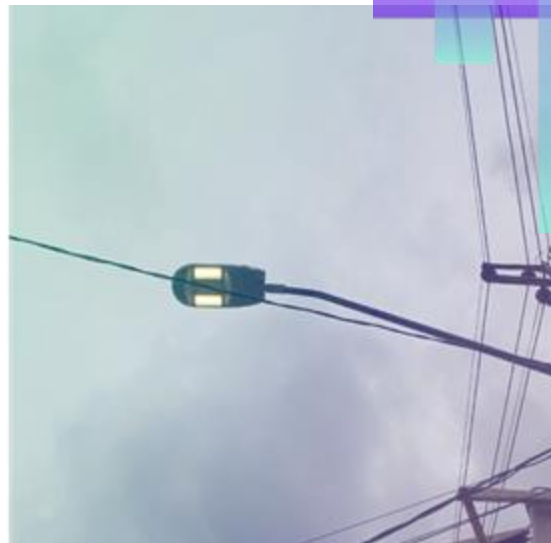


Traffic Monitoring



Smart lighting + 5G + Wi-Fi + Traffic management + Street analytics

Sorocaba, Brazil



Smart City

Philadelphia, PA



- People density (Heatmaps)
- Gunshots detection
- Counting vehicles
- Noise level
- Air quality
- Energy savings
- Public WiFi
- Security Cameras

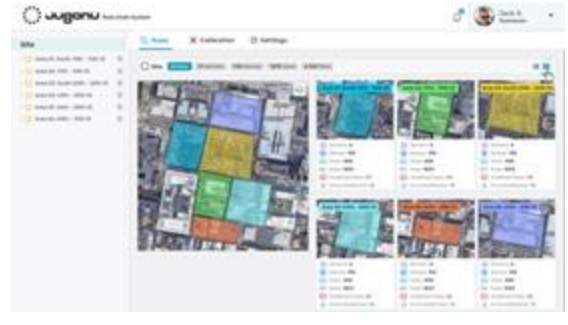
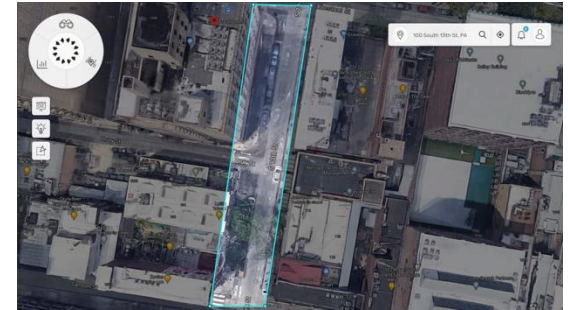
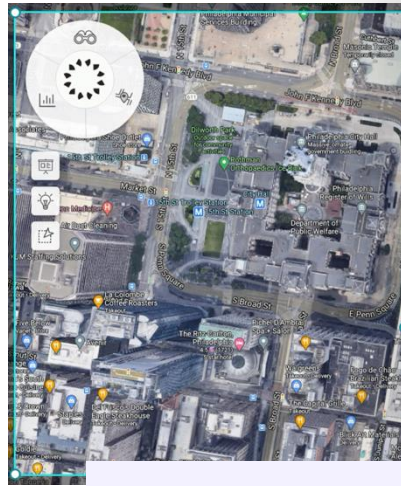
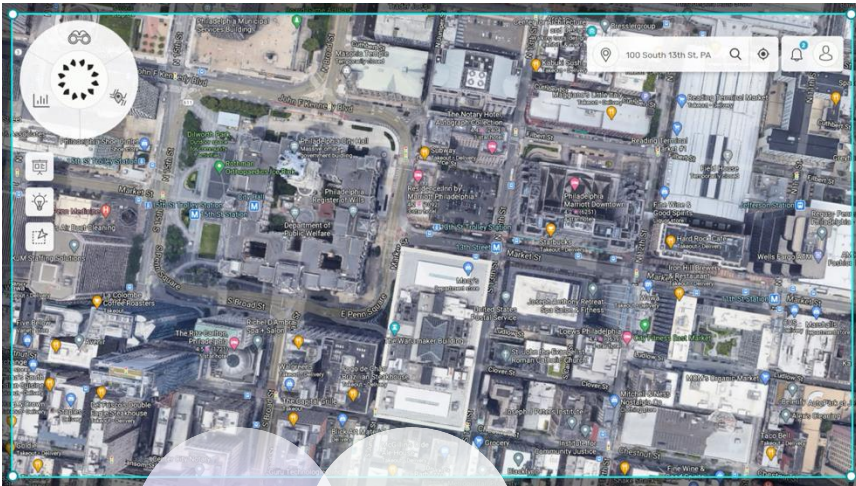
COMCAST

Juganu



Smart City

Philadelphia, PA



- Crowd detection
- Air pollution measurement
- Traffic monitoring
- Traffic light control
- Parking monitoring

Qualcomm Headquarter

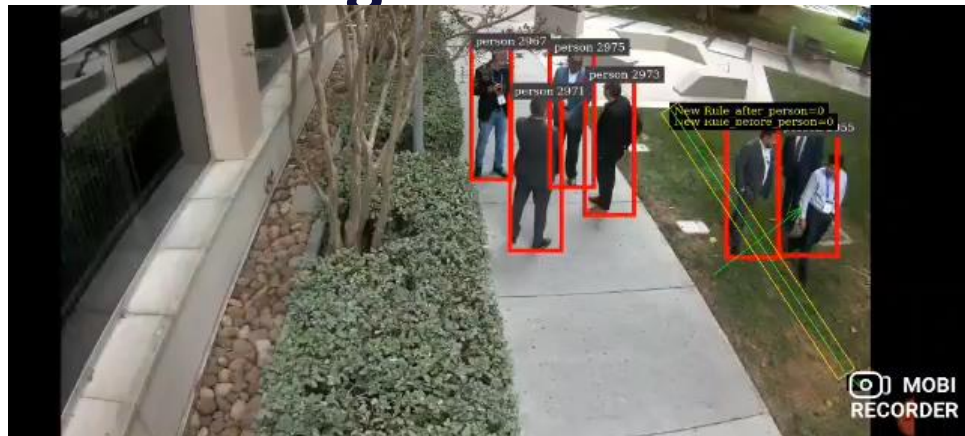
San-Diego



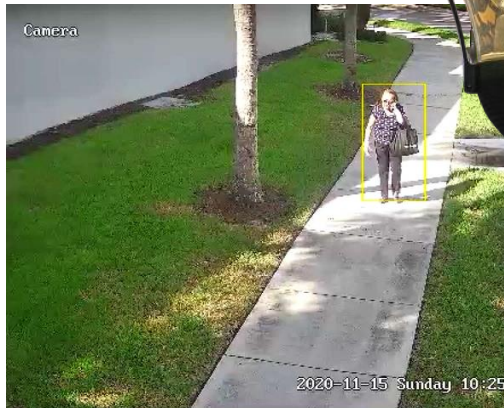
- Outdoor public Wi-Fi
- Restricted areas
- Security camera
- Lighting control
- LPR detection

Qualcomm Headquarter

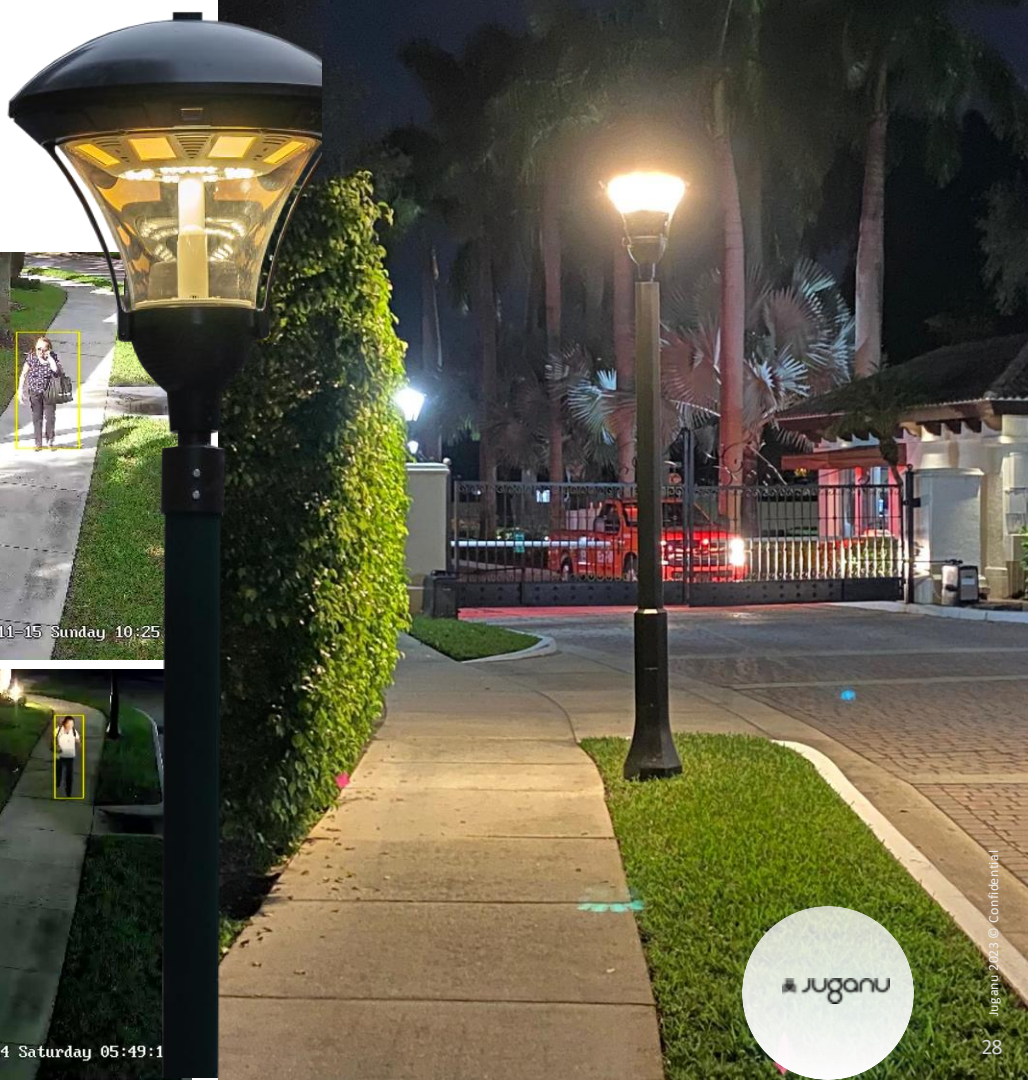
San-Diego



Presidential, Miami, FL



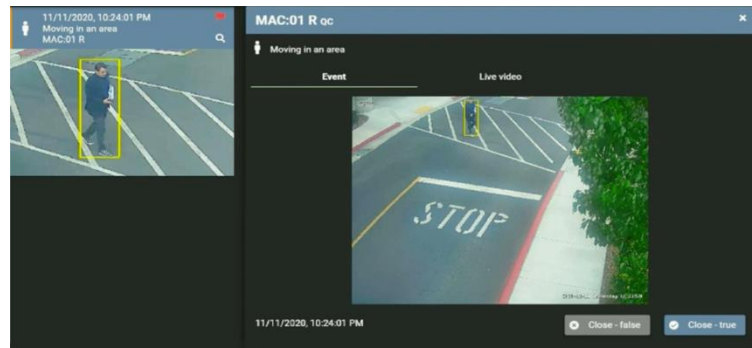
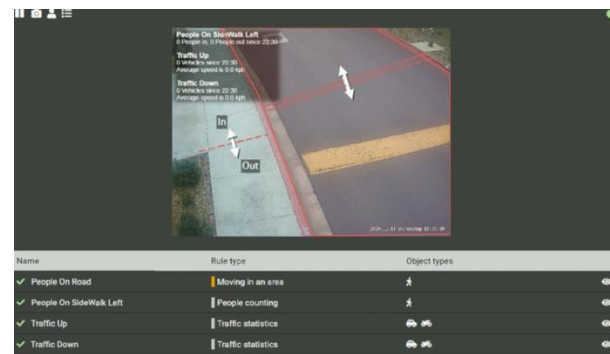
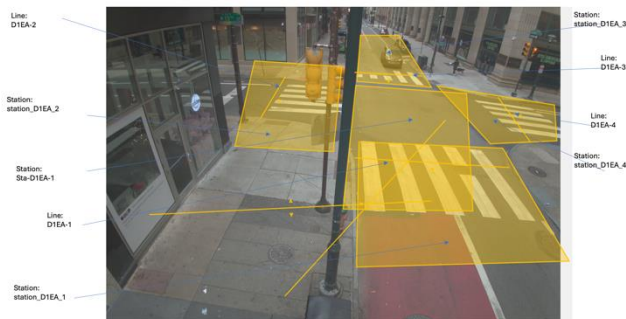
- Security Cameras
- People count and density (Heatmaps)
- Counting vehicles
- Noise level
- Lighting - Energy savings
- Public WiFi





Mark and Act

- Define the areas of interest
- Define the use case
- Query the dataset using a SQL query/Gen AI



	Vandalism	Facial	Loitering
Fri 24	0	4	11
	1	1	0
	-	-	-
Sat 25	1	8	4
	-	-	-
	-	-	-

Thank you.