VALERANN

WHAT IS LANTERNN BY VALERANN™?

A global leader in Advanced Traffic Monitoring Systems (ATMS), Valerann is redefining modern mobility, roadway operations and roadway safety by empowering road traffic authorities to make actionable, accurate and timely data-driven decisions.

Using historical and real-time data from an extensive set of sources, our cutting-edge data engine utilizes AI and computer vision algorithms to provide real-time accurate and actionable insights into road traffic situation on a single pane of glass.

Road traffic authorities in Europe, the US and Latin America use Lanternn by Valerann™ (LbV) to improve their situational awareness for their roads, allowing them to reduce incidents response time and to take proactive preventative measure to minimize risk of accidents and improve road safety

THE DIFFERENCE WE MAKE:

Over **95% of all incidents detected under 5 minutes**; lives saved, costs reduced.

Your new eyes on the road with **100% monitoring coverage.**

Road **event detection time reduced by 25%,** swifter response when every second counts.

Reduced congestion and carbon emissions by improving road throughput.

All achieved **at a fraction of the cost of a traditional ATMS deployment** – which is as much as €100,000 per kilometer.

"We have been using Laternn by Valerann™ for the past 10 weeks and we can perform rapid accident detection since then. The platform **places the location of the event almost in the exact location without needing cameras.**"

– Operations Director, Ruta 27, part of Globalvia portfolio

"This cost-effective traffic monitoring system is **a game changer for major events.**"

– European Space Agency (ESA)

Data Fusion

A wide range of data sources available to operators – CAV, weather, loops, radars, cameras etc., – if taken individually, not only creates noise, but also offer limited information on road events and causes alerts fatigue.

As the result, road operators' resort to time-consuming and error-prone manual checks. Lanternn by Valerann™ (LbV) uses deep data fusion to solve this issue, eliminating 93% of data noise through advanced analytics and complex cross referencing of millions of data points in real time.

LbV delivers accurate information in the form of ranked and prioritized events for actionable and data-driven decision making.

Computer Vision

Our advanced Computer Vision algorithms, in addition to identifying and tracking vehicles in real time, adeptly detect anomalies on the roads – wrong way driving, stopped vehicles, animals and pedestrians on the road as well as hazard lights, including situations where manual human detection is nearly impossible – saving lives by reducing incidence response time.

The system also detects out-of-view hazards, even under adverse weather conditions, along with offering reliable night-time detection. The system seamlessly integrates with a broad range of cameras including statics and PTZ cameras.

Product Modules

MONITOR

Real-time monitoring and prioritization of on-road activities on a single pane of glass.

- Complete visibility of customer-defined road network using both operator and third-party data, 100% monitoring coverage.

- A user-friendly interface with live access to all cameras and a real-time map with multiple layers from traffic flow to accident risk.

- Advanced analytics for automatic incident detection, identification, prioritization, and risk analysis, reducing operators' reliance on manual management.

MANAGE

Optimized road network resource management for swift response through incident prioritization:

- Identify upstream VMS to alert drivers approaching the affected area and pin CCTV streams with visibility of ongoing disruptions.

- Use NLP (Natural Language Processing) to write your own automation rules. Trigger pre-defined automated workflows and action plans in response to real-time conditions and events: alert emergency services; control ITS resources, such as VMS and CCTV and dispatch patrol vehicles.

- Rapidly log key information about an event and the steps taken to respond following automatic and manual data capture.

- Distribute the details of an event or disruption to stakeholders and drivers using one-click integrations with MS Teams, Slack, WhatsApp, and email clients

INSIGHT

Maximum value from accrued data, comprehensive analytics, and system-generated insights for efficient resource planning. Allows for creation of highly customized reports and/or dashboards using a user-friendly reporting UI.

- Use historical data and current traffic situation to have a better understanding of road operations and resources optimization.

- Monitor trends associated with events type, time, and location, relative to traffic and weather conditions. Identify risky areas, track events detection time and conduct root cause analysis to identify factors contributing to the events.

- Have a better understanding how current and imminent   weather conditions impact traffic. Evaluate risk of accidents caused by dew, frost, or icy conditions. Take proactive measures to minimize risks.

- Create highly customizable reports for monitoring, business analysis or planning purposes.

DATA POINTS

ITS infrastructure data – Open Data + CCTV (static or PTZ), radars, loops and VMS

Open Data – Navigation apps, data partners, public-facing CCTV, social media

Advanced ITS – Open Data & Basic ITS + support vehicle GPS tracking, VMS controls, ingestion of historical data, CV/AV and IoT sensors, and other customer-specific sources (i.e., weather sensors, bus routes, etc.)

Contact us:

info@valerann.com