

How Edge AI Video Analytics transforms the Transportation Industry

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A novel edge ai video analytics solution by Elma Electronic, Hailo and Isarsoft is transforming how business intelligence is conducted in the transportation industry.

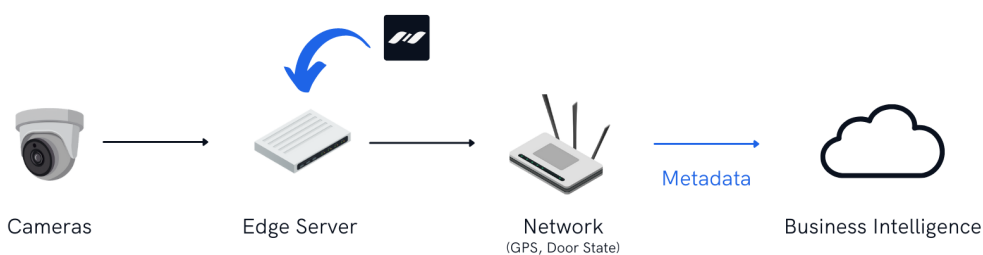
In light of rapid urbanization and a steadily growing demand for mobility, many nations see public transportation as a sustainable solution to the mobility challenge.

To provide a real alternative to individual transport and to solve the mobility challenge, public transport with its complex system of buses, trams, trains and train-stations have to become more efficient, user-friendly and intelligent.

Swiss embedded computing provider Elma, Israeli AI chip manufacturer Hailo and German AI video analytics software vendor Isarsoft, have partnered to provide a novel edge AI video analytics solution which finds use in vehicles and train stations to provide operators with accurate real-time insights from video cameras.

Edge AI Video Analytics in Buses, Trams and Trains

The rugged, compact and reliable design of Elma's AI edge computing Box PC with the Hailo-8™ AI accelerator enables seamless retrofitting into existing onboard infrastructure to power Isarsoft's Perception, an AI business intelligence application which transforms video from security cameras into actionable metadata.



Traditional sensors used onboard vehicles often only have a single purpose as opposed to AI Video Analytics which can power a variety of use-cases from a single input type: Cameras. Leveraging the existing onboard camera infrastructure, the novel solution provides significant cost savings to operators - not only during initial procurement but also when maintaining the system.

Passenger Counting, Occupancy Monitoring, Trip Time Estimation and Space Monitoring are four prominent examples of how Edge AI Video Analytics provide KPIs for transport operators and planners.

Categories:
Edge AI, AI, ITS,
Railway,
Transportation, IoT,
Video Analytics,
Onboard AI

Contact:
[Elma Electronic](#)
[Hailo](#)
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With the superior processing power of the Elma solution powered by the Hailo-8(™) chip, these metrics can be sent in real-time to Passenger Information Systems helping commuters travel comfortably.

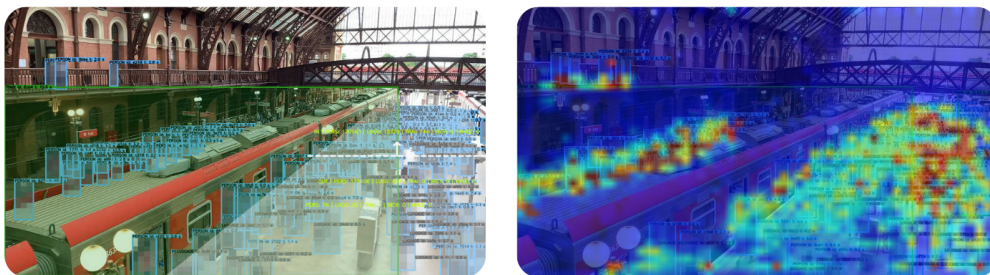


Smart Train Stations, just a click away with AI Video Analytics

Train stations are an integral part of any larger transportation system. They not only provide entrance to the transportation services, but also provide facilities for shopping, food and recreation.

With the solution by Elma, Hailo and Isarsoft, cameras in train stations become an integral part of business intelligence with a click of a button.

Whether the goal is to increase efficiency, customer satisfaction or safety, the AI Video Analytics solution enhances train station operation, planning and security.

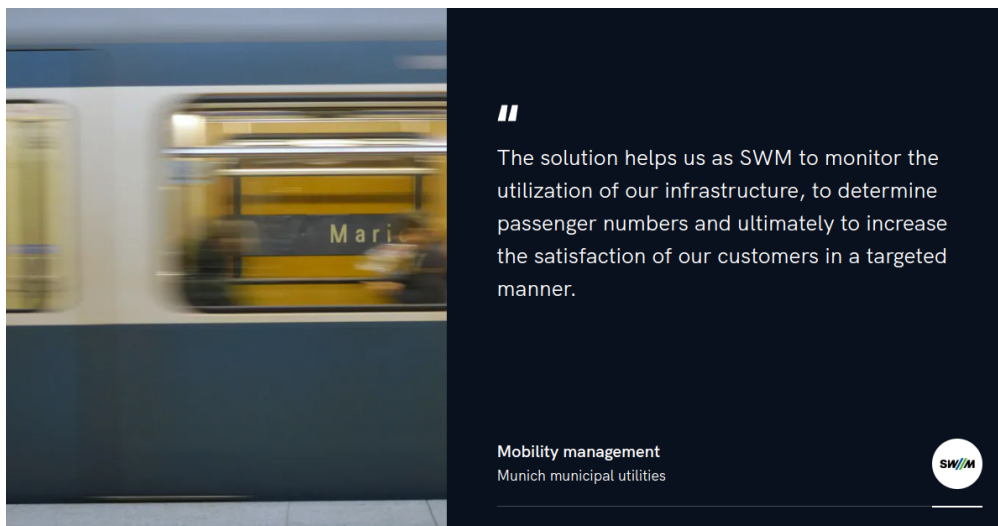


A seamless integration with existing IT infrastructure such as video management systems, makes the deployment of video analytics a matter of no time, even with thousands of cameras in multiple locations.

Use-cases such as people flow measurement, unattended luggage detection, heat and dwell maps or overcrowding alarms can be realized with the superior AI capabilities of the Elma system empowered by Hailo.

You are in good company

With the solution by Elma, Hailo, and Isarsoft, you are in good company. Reliability, ease of use and a deep understanding of the transportation industry are the fundamentals of the shared value proposition. Customers such as the transport authority of Munich confirm that even in most challenging scenarios like the Oktoberfest, the solution has proven its ground.



More about Elma Electronic

Elma Electronic is a global leader in embedded computing solutions including integrated chassis systems, board products, modular enclosures, equipment cabinets and precision hardware components in standard and custom configurations. As a global organization, we keep close to our customers and partners worldwide with sales, design and manufacturing facilities across three continents.

Reliability and long-term support with a history of deep technical expertise and precision engineering. That's Elma.

Contact: [Elma Electronic](#)

More about Hailo

Established in Israel in 2017, Hailo developed the world's best performing AI processors for edge devices. As a leading AI chip company with worldwide business activities and world-leading partners in different domains, Hailo's deep learning technology is set to transform the AI chip industry, putting new compute possibilities within reach. The AI processor is designed to fit into smart devices

in various industries and use cases including automotive, smart cities, retail, and industry 4.0.

Contact: [Hailo](#)

More about Isarsoft

Isarsoft is a Munich based video-analytics company founded in 2019. Isarsoft helps customers and partners to utilize the potential of security camera systems through artificial intelligence, developing video analytics solutions that impress with reliability, ease of use and a wide range of integrations.

Contact: [Isarsoft](#)