



**Rail Vision**  
INTELLIGENCE ON TRACK

## **Advanced obstacle detection and classification technology for the rail industry**

Rail Vision designs, develops and manufactures pioneering systems to improve railway safety and maintenance through electro-optic sensors, artificial intelligence and deep learning.



# INTELLIGENCE ON TRACK

In today's increasingly complex rail industry, Rail Vision provides an extra level of safety, security and performance with visibility at distances far beyond the reach of the human eye.

Using advanced obstacle detection & classification technology, Rail Vision detects objects on and along the tracks from a distance of up to 2km in real time and under most weather and light conditions – paving the way to a safer and more efficient rail future.

Electro-optic sensors, artificial intelligence and deep learning are fused to create a unique technology for the railway industry.

Rail Vision's solutions offer detection and classification of objects and obstacles (e.g., humans, vehicles, signals), pathfinder (i.e., switch state detection), distance measurement, and infrastructure condition monitoring.

**railvision.io**

## Applications

Tailormade to meet every customer's specific needs, the systems are available for main lines and shunting yards, as well as light rail vehicles (LRV) operating in urban environments.

Rail Vision offers a range of optional complementary features based on collected and analyzed big data: image-based navigation, GIS mapping and predictive maintenance.



### Main Line

Detection and classification for long distance obstacles.

Provides an extended visual range of up to 2km, regardless of weather and light conditions.



### Shunting Yard

Streamlining shunting yard operations and enhancing safety.

Enables remote operation and coupling of the locomotive by detecting & classifying objects within a range of up to 200m.



### Light Rail Vehicles

Collision avoidance for the urban environment.

Detects and classifies obstacles at a range of up to 100m in most weather and light conditions.



### Big Data Services

Analyzing rail infrastructure and surroundings.

Enables customized analysis of railway infrastructure and surrounding ecosystems.

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### About Rail Vision

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