AVALTAR

AI-DRIVEN SAFETY SOLUTIONS

CATALOGUE

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May 2025

Our expertise lies in...

...AI image processing, neural networks, and machine learning, along with broad knowledge and background in workplace safety. We are always up-to-date with the latest cameras and sensors suitable for safety purposes and a few steps ahead in innovative technologies.

We are dynamic, innovative and customer-oriented enthusiasts based in the Czech Republic, focused on the development of revolutionary workplace safety solutions for both industrial and public sector.

With years of experience in safety innovation, we understand the customers' needs and that every industry has its own set of safety rules and regulations. Therefore, our team creates custom-made solutions utilizing the most suitable technologies and equipment.

Whether you require anti-collision systems for forklifts, static camera monitoring for entryways or solutions for challenging places where accidents are more likely to occur, we are here for you.

Enhance safety. Reduce costs. Optimize processes.

„We are here to assist HSE managers, directors, and owners to keep an eye on their workplace safety, no matter how big or small their organization is.

We've developed systems that will improve efficiency, reduce costs, and increase safety, all at once. You can come to us with any of your safety concerns and trust that we will handle them with care and expertise."

- Barbora Valtarová, founder & CEO

Smart Personalisable Anti-collision Recognition Kit

SPARK, the revolutionizing safety system from AVALTAR, is a fully customizable solution which keeps the employees safe and protects the company's assets and costs.

SPARK is using a fusion of various technologies, such as AI and image recognition, LoRa, UWB for wireless communication, and has an option to send notifications by SMS or e-mail.

This compact AI box guarantees reliable detection from up to 3 cameras at a time. The cameras are equipped with an IR night-light vision, making SPARK suitable even for a dark environment.

There are multiple types of predefined output peripherals, which can currently cover most of the desired warnings, alerts and action.
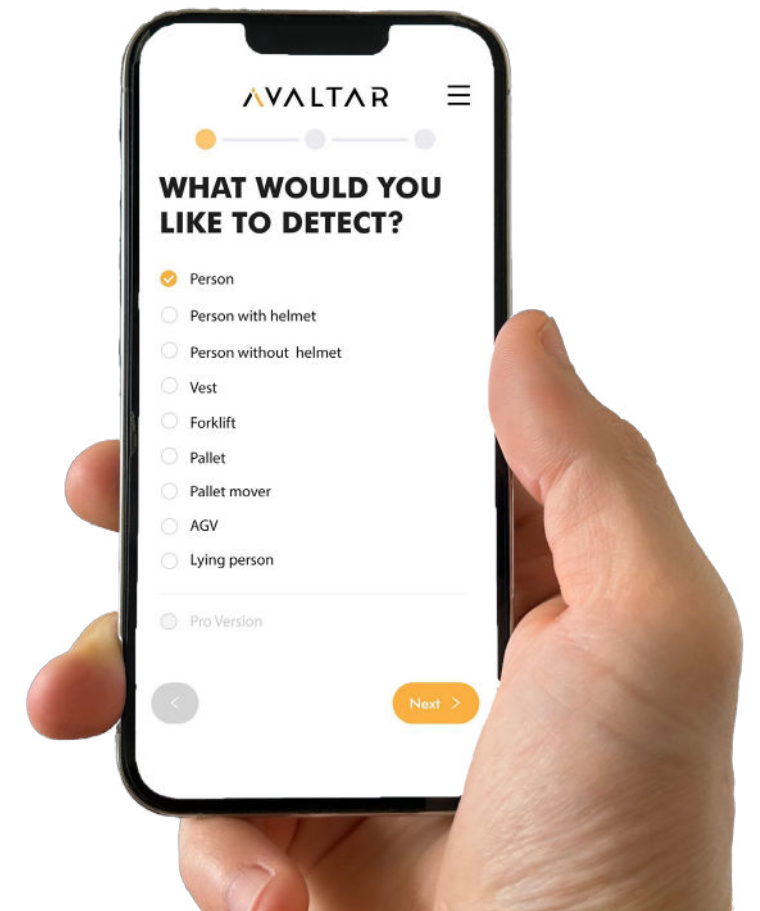
3 steps to customized safety:

Where?
SELECT **DETECTION ZONES**

What?
SPECIFY **DETECTION OBJECTS**

How?
CHOOSE **SAFETY ACTION**

Due to SPARK's variability, you can detect any object in any area with multiple customizable alerts and safety actions.

WHAT WOULD YOU LIKE TO DETECT?

- Person
- Person with helmet
- Person without helmet
- Vest
- Forklift
- Pallet
- Pallet mover
- AGV
- Lying person
- Pro Version

Next

LIGHT UP YOUR SPARK

Innovatine SW, robust HW
Smart, reliable and suitable for industrial conditions.

Scalability and modularity
Easily adapt to changing needs and current precautions.

Calibration via user-friendly app
Install and calibrate from your pocket.

Object detection training
Specific hook, workwear, non--standard environment? You name it, we will teach SPARK for you.
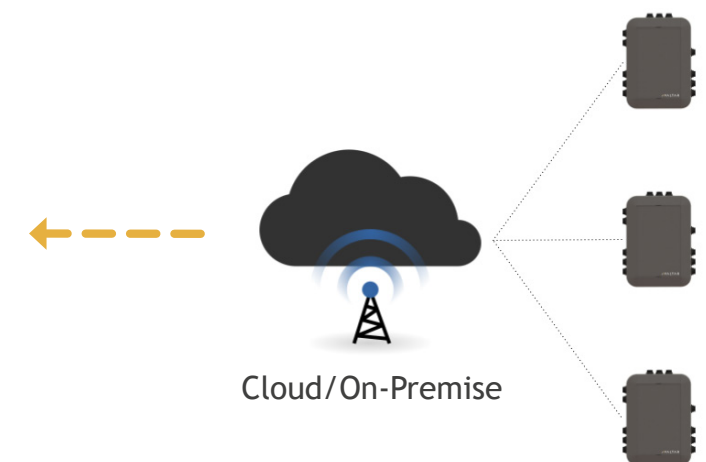
IoT connectivity
Simple integration with other devices and technologies.

PLC

AVALTAR

The future of autonomous safety

EASI 4.0 is a Cloud/On-Premise platform which serves as a complex safety management tool. It provides a clear overviews of the safety situation, interconnection and remote calibration of all installed SPARKs, incident statistics and demonstration of high-risk areas.

Cloud/On-Premise

EASI 4.0 software interface

One safety system, hundreds of applications, countless saved lives

SPARK was created to meet a variety of customer needs and can be applied across different industrial sites. The possible usage can be categorized into three main areas:

1. Prevention
Prevention of accidents by taking necessary precautions and safety measurements monitoring (an access control, a safety PPE monitoring, reporting a density of people in areas. etc).

2. On-site safety
Avoidance of accidents in case a person gets too close to a dangerous area, or nearby a dangerous machine/object/situation or around a material handling equipement (forklifts, cranes, etc.).
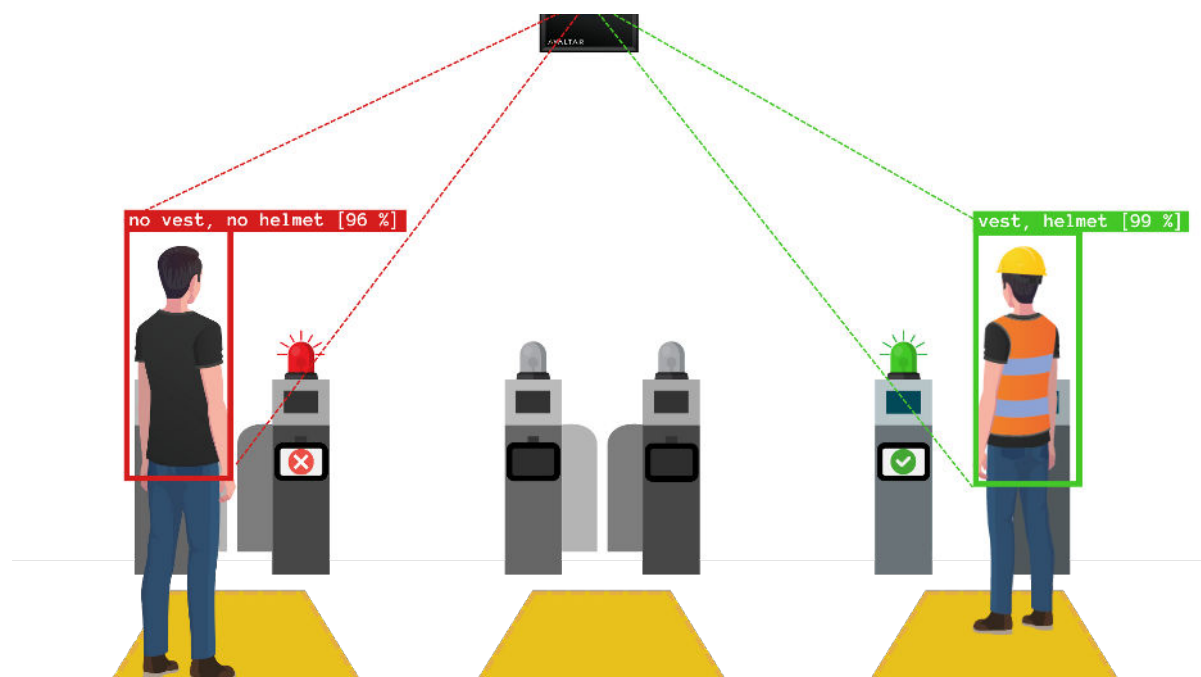
3. Assistance
Detection of accidents, injuries, faints or collisions of a pedestrian followed by calling help through alarm, SMS or e-mail to emergency sevices, HSE managers, etc.
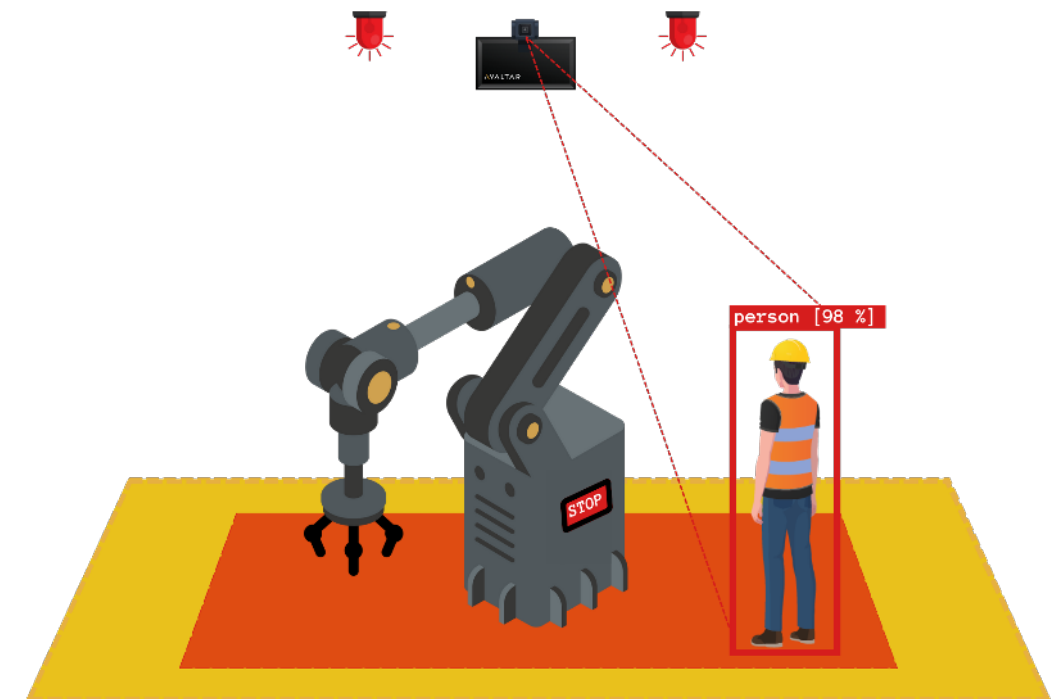
USAGE EXAMPLES

1 ACCESS CONTROL
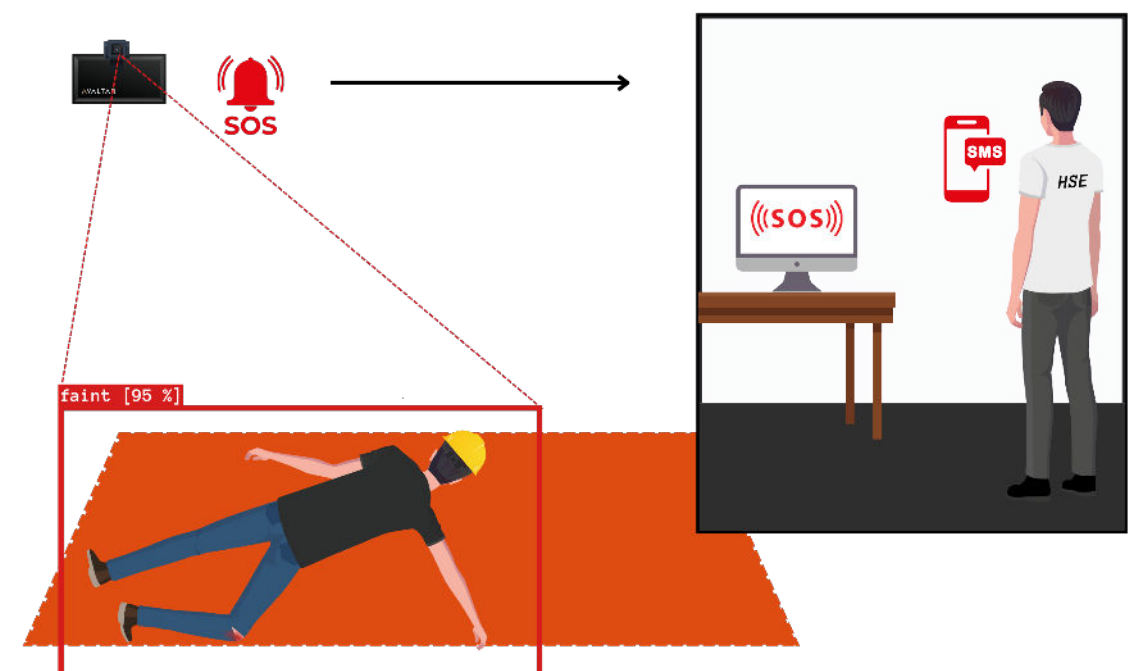PPE monitoring (opening gates, turnstiles, limited entrances etc.)

no vest, no helmet [96 %]
vest, helmet [99 %]

CUSTOMIZATIONS

2 MACHINE CONTROL
automatic STOP of robots/machines/handling equipments/cranes

person [98 %]
STOP

3 ISOLATED WORKPLACE MONITORING
detection of no movement, fall of a pedestrian and call for help

SOS
faint [95 %]
SMS
HSE

FORKLIFT ANTI-COLLISION SYSTEM

What is it about?

fully autonomous

zones monitoring

accurate detection

easily customizable

AVALTAR anti-collision system efficiently prevents accidents in your workplace, safeguards employees while extending material handling equipment lifespan.

„In simple terms:
advanced software & robust hardware."

In AVALTAR, we are constantly striving to make the best use of advanced AI technologies to keep you secure and prevent any injuries.

Our AI camera solutions are configured to precisely monitor 2 zones (warning and danger zone) around the forklift. These zones are set up during installation and can be adjusted anytime through our mobile app.

Thanks to an advanced neural network, the system accurately detects pedestrian movement within the warning and danger zones and notifies the driver in real-time to prevent possible collisions. Such notifications include visual and audio warnings, which can be customized based on the client's preferences and needs.

Moreover, the system is ready to slow down or stop the forklift completely, if necessary.

automatic deceleration

real-time response

waterproof dustproof

maintaining driver's attention

DRIVER'S CAMERA

IP CAMERA

AUDIO WARNING

DISPLAY

CONTROL UNIT

indoor & outdoor usage

optional Cloud platform

audio notification

easy attachment via magnets

CAMERA

IP67
Suitable for an industrial environment and outdoor usage

LED lights
Creates more reliable recognition in a dark environment

120° field of view
Provides sufficient coverage of warning zones and surroundings

CONTROL UNIT

Micro SD Card
Data storage (e.g. footage of collision, alerts)

Wi-Fi and UWB
Integration with other wireless technologies for specific requirements

Passive cooling + IP67
An aluminium case ideal for industrial places

CVBS   CAM1   CAM2   CAM3   PWR
ANT-M   ANT-D   WI-FI   GPS

DISPLAY

View of surroundings
A 7" LCD with up to 3 simultaneous camera views or a simple rear view
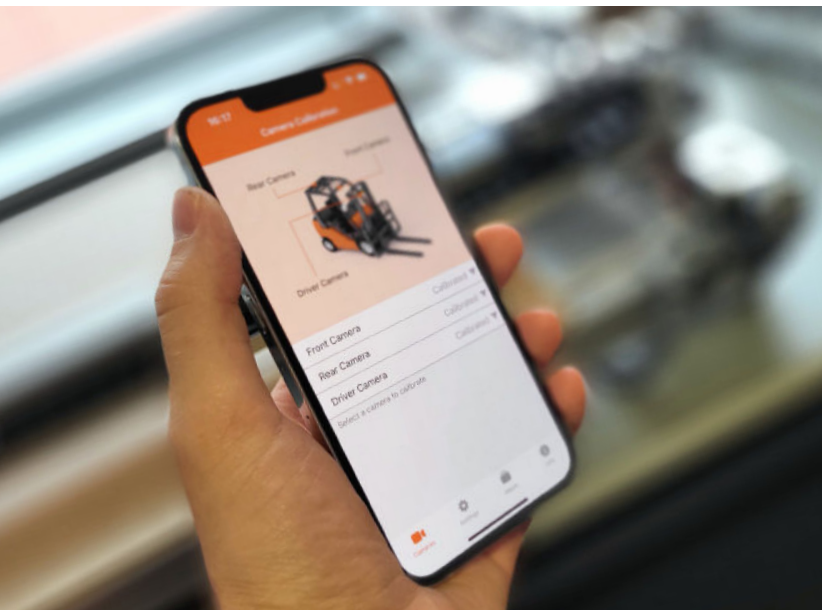
Visual notification
Notifies the driver with an orange or red signalization if there is a person in the warning/danger zone

IP67
Suitable for an industrial environment
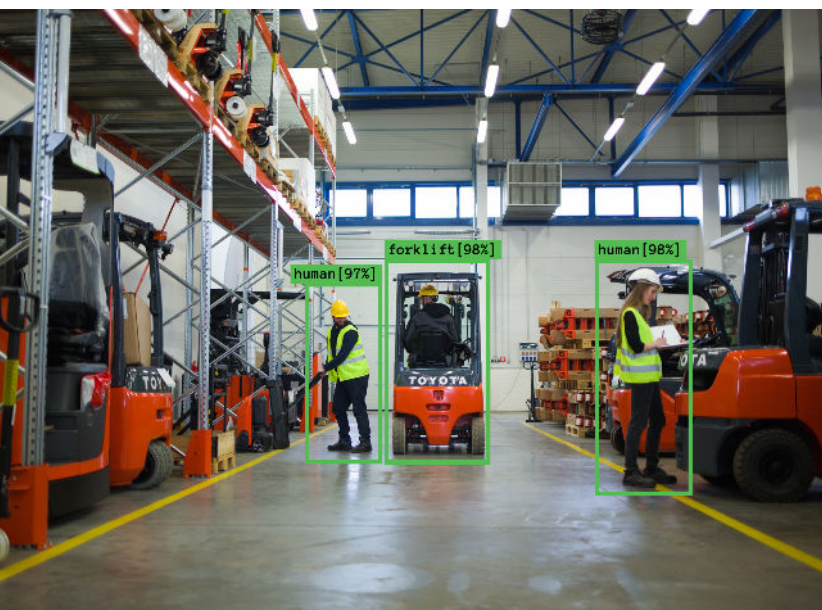
MOBILE APP

Easy configuration
An immediate adjustment of detection zones and the forklift deceleration

Compatibility
Supported by iOS and Android

System settings
Access to the camera calibration, notification settings, statistics, etc.

AI DETECTION

Accuracy
A reliable, real-time detection to ensure minimum false alarms

Customizable
Adjustable to specific safety needs and concerns

Space monitoring
Detection of pedestrians and forklifts, PPE, accidents, etc.

human [97%]   forklift [98%]   human [98%]

DSS   included in the solution no. 3

Driver safety system
Enhances driver's awareness

Driver camera
A separate camera for drivers alerts them if they exhibit signs of:

- fatigue
- smoking
- smartphone usage

1 **AVA-F1-DB**
rear view

AVA-F360-DB **2**
rear view and side camera view

3 **AVA-F2-DB-DR1**
front and rear view
+
← – – – – **DSS (DRIVER SAFETY SYSTEM)**

More than 20 partners...

...are cooperating with us throughout Europe. They can support you locally at your industrial site, assist with the installation of AVALTAR solutions, handle the maintenance or provide any other support you may need.

Do not hesitate to contact us and we will guide you to the appropriate partner.

A few words from our partners:

„We are extremely pleased with the partnership established with AVALTAR. Their products and services have consistently demonstrated quality and professionalism, effectively solving problems and creating safer work environments. We look forward to continuing our collaboration and exploring new opportunities together."

- Sergio Cardoso, Portugal, Fox Solutions

„Even though AVALTAR Tech is a newly started company they are very innovative and produces the best products within anti-collision systems, for the benefit of us as a distributor and our customers. AVALTAR always delivers an excellent service and, most important, high-quality products, which increases the work safety at the end users.

- Thomas Vestergaard, Denmark, ECK

„We are pleased to cooperate with AVALTAR Tech and proud to be their partner in Romania. Their sales and technical support are fast and clear, and their product portfolio is well-designed. Working with them has been a positive and rewarding experience as we value their honesty and flexibility."

- Kardynal Manufacturing, Romania

Interested in becoming one of them?
Talk to our sales team.

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AVALTAR

AI-DRIVEN SAFETY SOLUTIONS

Creating stories with happy endings.