

DEEP VISION

The new products line based on the most
advanced Deep Learning Algorithms

Discover A.I. Tech new products line
DEEP VISION
based on the most advanced
DEEP Learning and Computer VISION
algorithms

9

*Video Analytics
Plugins*



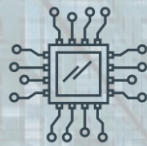
A.I. Tech technology has been selected as the winner of the Business Intelligence category in the Benchmark Innovation Award 2018 and among the finalists in 2019. The awards are designed to recognize and reward innovative thinking and the delivery of benefits through advanced security solutions.

Detection of faces [masked and not masked]

AI-FACEDETECT-DEEP



Gender recognition and age estimation



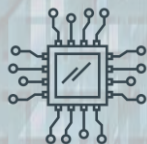
AI-BIO-DEEP

Estimation of the number of persons in a crowded area

AI-CROWD-DEEP



Flame Detection



AI-FIRE-DEEP

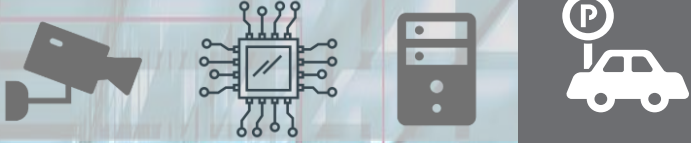
Smoke Detection

AI-SMOKE-DEEP



Smart Parking

AI-PARKING-DEEP



Anomaly detection on the road



AI-INCIDENT-DEEP

Statistical data analysis on the road

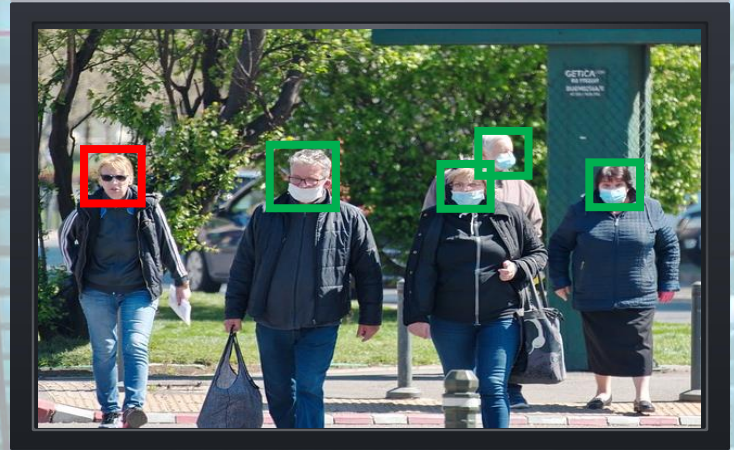
AI-ROAD3D-DEEP



Fall Detection



AI-SPILL-DEEP



AI-FaceDetect is the video analytics plugin able to detect the faces of the persons inside the scene. It is also able to distinguish faces with mask from faces without mask. It implies that the plugin can be used for both statistical [in order to know the number of persons inside an area] and security purposes [by opening a door only if the face of the person is well visible].



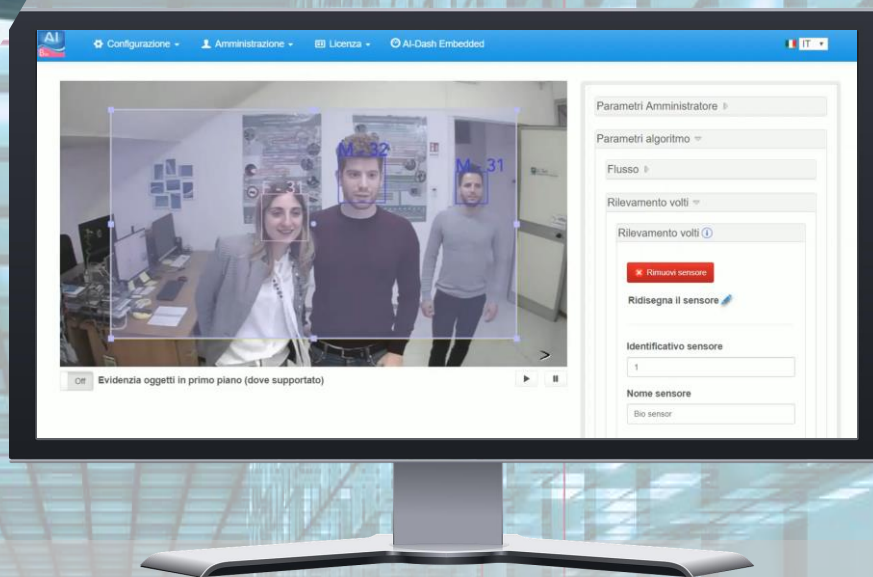
Face Masked Detection



Detection of faces without mask



AI-Facedetect-Deep requires that the camera must be installed at a height in the range 1.70 - 1.80 m, with frontal view of the faces of the people taken by the camera.



AI-BIO-DEEP allows you to have at a glance statistical data related to the **gender, age and time of permanence** of people taken by the camera within the sales area or stand in front of a monitor. Thanks to the use of optimized deep networks designed by the A.I Tech team, **AI-BIO-DEEP can work directly on board of the camera.**



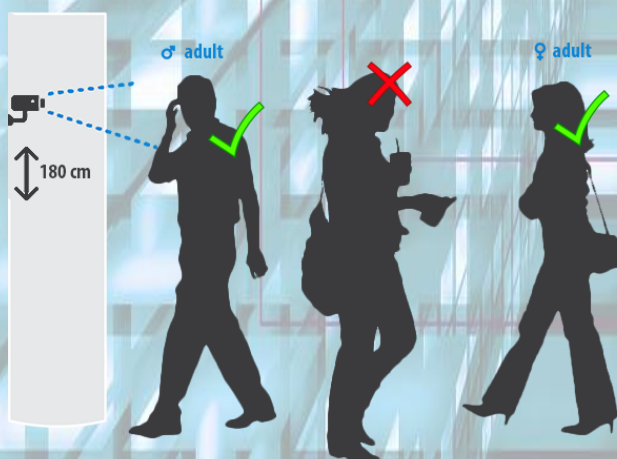
Gender Recogniton



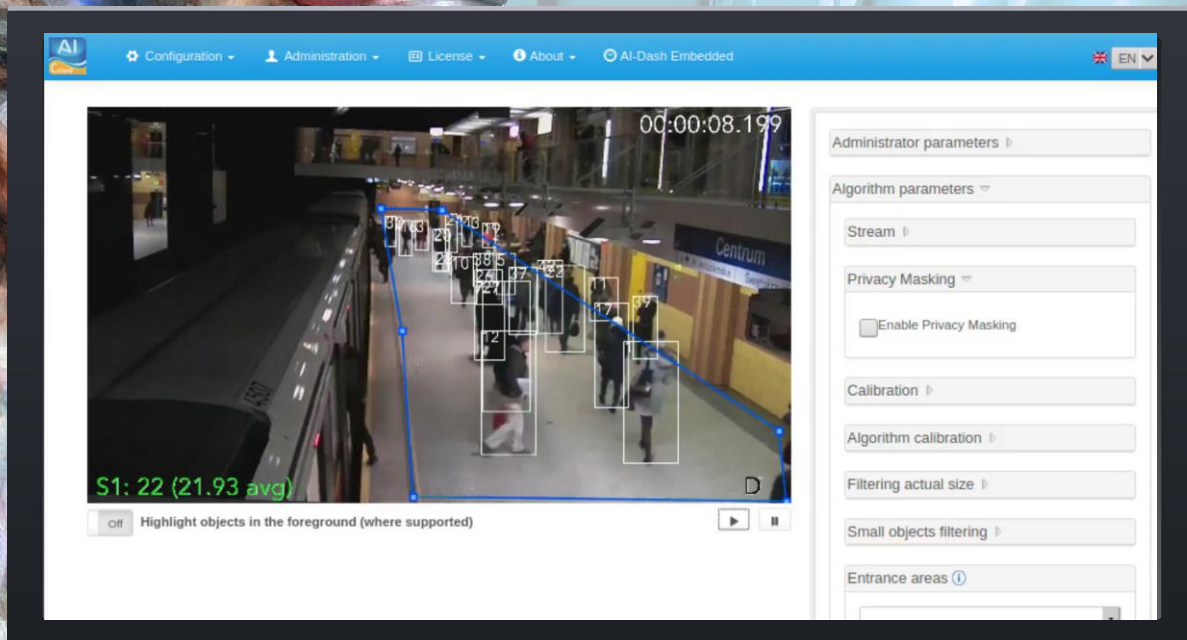
Age Estitmaton



Permanence time evaluation



AI-Bio requires that the camera must be installed at a height in the range 1.70 - 1.80 m, with frontal view of the faces of the people framed by the camera.



AI-CROWD-DEEP is the video analysis plugin that, thanks to the employing of advanced deep neural networks, allows to estimate the number of people inside an area, even in presence of a huge amount of persons or with a slight movement of the camera, and to raise an alarm in case there are too many persons inside the area.



Crowd estimation

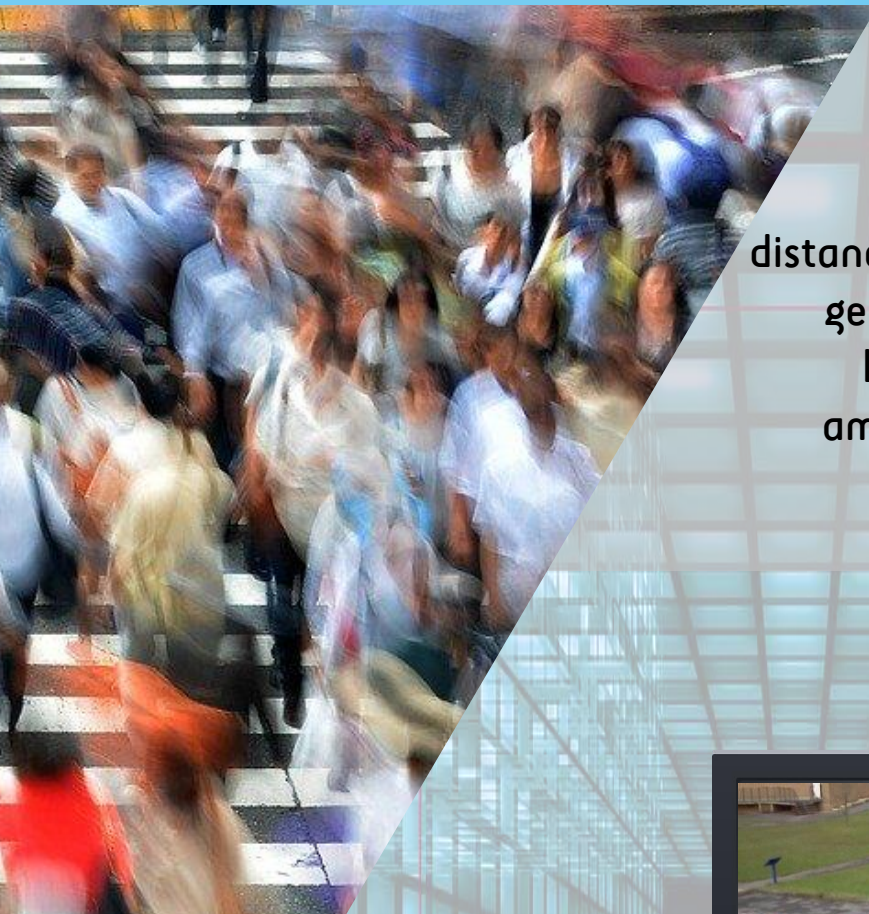


Overcrowd estimation

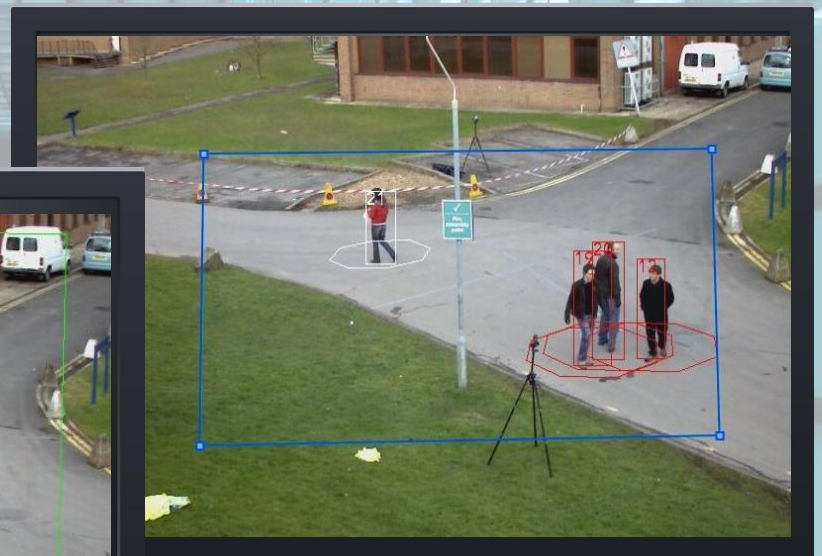


Social Distances analysis

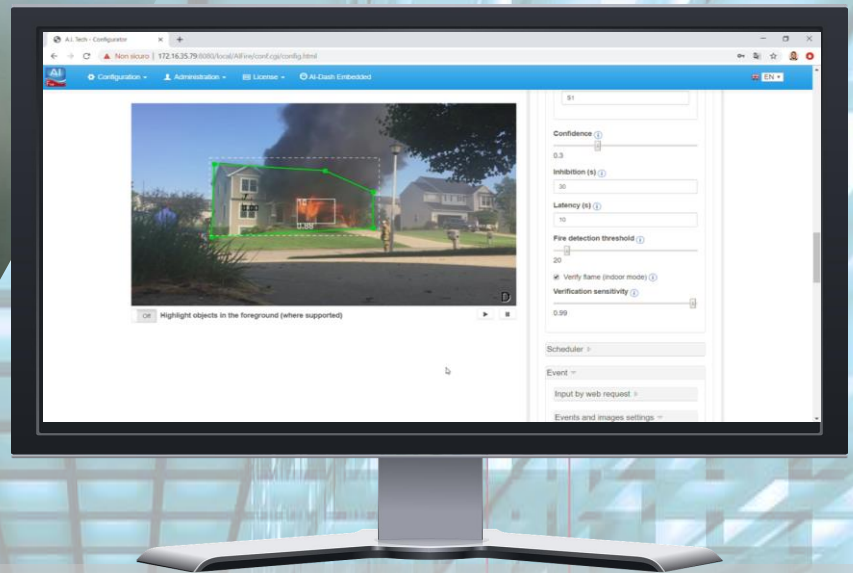
AI-CROWD-DEEP can be used in both **indoor** (in retail and business intelligence applications) and **outdoor** environments (for transportation and smart city).



AI-CROWD-DEEP also allows you to evaluate social distances, i.e. the distances between people inside the scene, generating an alarm when the distance between two persons is for a certain amount of time less than the minimum allowed distance.



AI-CROWD-DEEP requires the use of a server equipped with GPU, in case a strict real time is required. Otherwise, a CPU-only server will be enough.



AI-FIRE-DEEP is the video analytics plugin for the detection of flames

AI-SMOKE-DEEP is the video analytic plugin for the detection of smoke



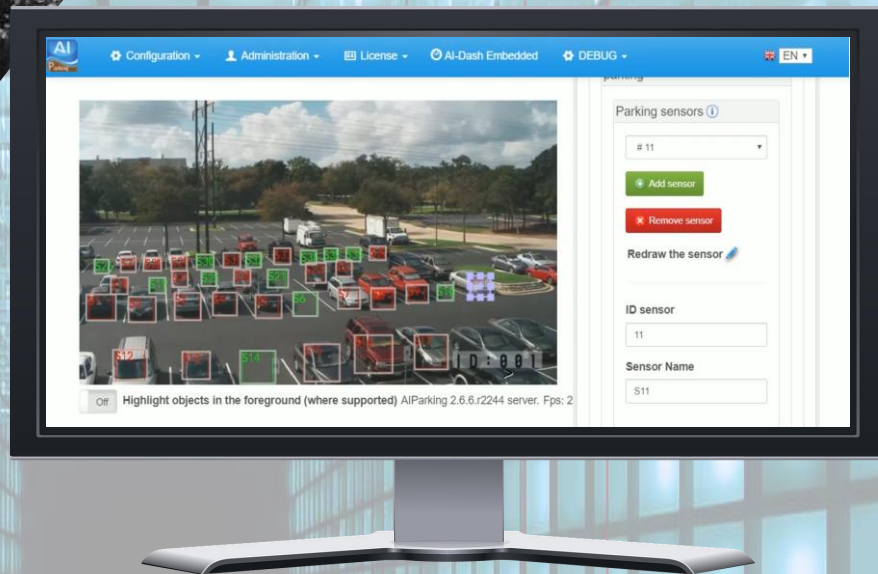
Fire Detection



Smoke Detection

AI-FIRE-DEEP e **AI-SMOKE-DEEP** can be used to ensure the safety of the environments, through the early detection and localization of smoke and flames; for city safety, through the signaling of fires or outbreaks of fire in outdoor environments, for example on bins and vehicles; for video surveillance of critical areas such as petrol stations, airport runways and railway tracks, through the reporting of accidental or malicious fires.

Note: both **AI-FIRE-DEEP** and **AI-SMOKE-DEEP** require that the color of the flame/smoke is visible [no night mode or thermal camera].



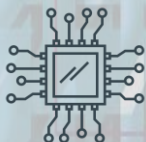
AI-PARKING-DEEP is the video analytic solution for, perimeter and non-perimeter, parking areas monitoring. AI-PARKING assesses whether a space is free or occupied, thanks to the use of advanced algorithms for **detection** and **classification** of **vehicles** based on deep networks, designed and developed by A.I. Tech team.



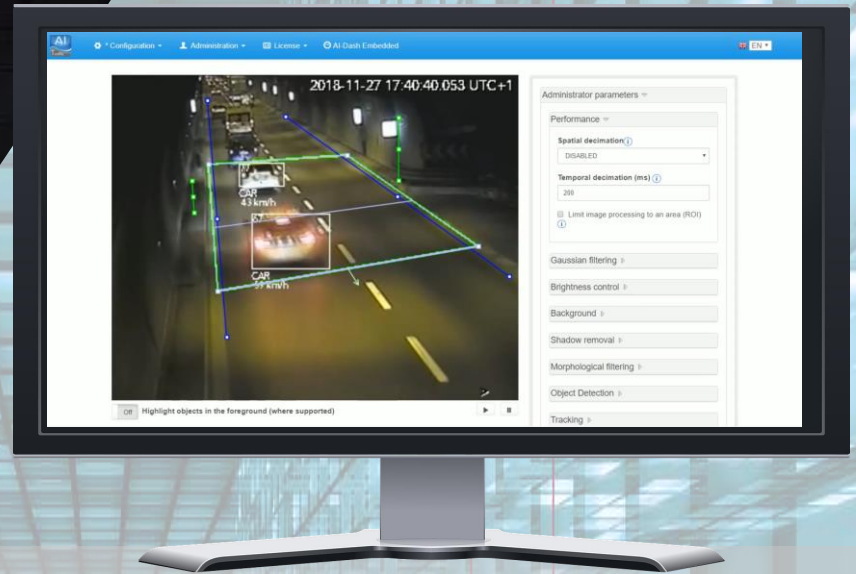
Occupied / Free
space evaluation



Free spots number
evaluation



AI-PARKING is able to work directly on
board of the camera!



AI-ROAD3D-DEEP is the video analytics solution for traffic monitoring, the smart roads and the smart cities. Thanks to advanced algorithms based on the use of deep neural networks, **AI-ROAD3D-DEEP** can be used to extract statistical information relating to the crowding of vehicles on the road.



Vehicle counting



Vehicles classification
[motorbike, car, truck]



Avg Speed



Vehicle colour



Traffic Density



High Speed



AI-ROAD3D-DEEP requires the use of a server with GPU



AI-INCIDENT-DEEP is the video analytics solution for traffic monitoring, the smart roads and the smart cities. Thanks to advanced algorithms based on the use of deep neural networks, **AI-INCIDENT-DEEP** can be used to extract alarmist information relating to the crowding of vehicles on the road.



Pedestrian detection



Stopped Vehicle



Congestion detection



Wrong-way Vehicle

AI-INCIDENT-DEEP e **AI-ROAD3D-DEEP** are available integrated together in the bundle **AI-TRAFFIC-DEEP**

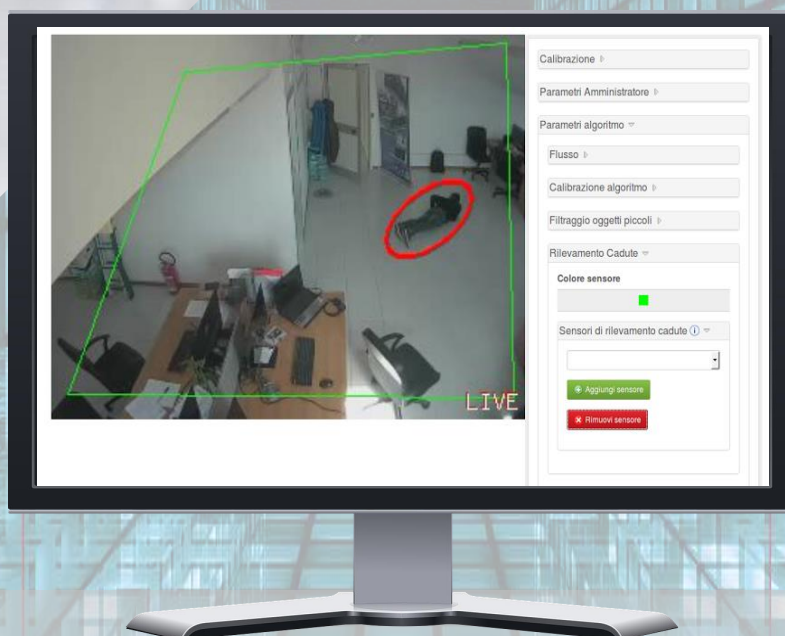


AI-INCIDENT-DEEP requires the use of a server with GPU



Fall Detection

AI-Spill is the video analytic plugin based on deep learning able to detect the falling of a person.



AI-SPILL can be used in the hospitals or in the care homes, in order to detect the falling of the patients; in private homes inhabited by elderly or disabled persons, in order to allow immediate intervention by family members; in the schools, for student protection, and for detecting falls in corridors and unattended environments. In general, its use is extremely useful in any public or private environment, where it is necessary to protect people, detecting the falls in real time and alerting the staff responsible for immediate rescue.



A.I. Tech

The Vision of the future. Now.



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AWARDS

CIOApplications europa TOP 25
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THE MOST IN
10 *Innovative*
ARTIFICIAL
INTELLIGENCE
SOLUTION PROVIDERS
2018



CorporateLiveWire
**INNOVATION
& EXCELLENCE**
AWARDS 2020

A.I. Tech

2020 Award Winner

Most Innovative in Video Analytics