

BEHAVIORAL RECOGNITION ANALYTICS FOR PUBLIC TRANSPORTATION

MONITOR IN-VEHICLE OCCUPANTS WITH ARTIFICIAL INTELLIGENCE VIDEO UNDERSTANDING TECHNOLOGY

Fully autonomous vehicles have no drivers – only passengers.

In sporadic pay-as-you drive services, there is no car owner and therefore no person in charge. In driver-for-rent services or in public transportation vehicles, the passengers are unknown or strangers.

In all these use-cases it is important to ensure that all in-vehicle occupants are secure, safe and the vehicle is protected from occupant's improper use and external threats.

The increasing demand for public transportation (metros, trains, shuttles), together with analysts predictions regarding the future of large-scale use of autonomous robo-taxis and robo-bus generates the need for in-vehicle monitoring that will ensure in-vehicle safety. viisights' in-vehicle monitoring system utilizes viisights' ability to understand human behavior via live video streams sourced from an in-vehicle camera(s). In many cases, the video stream will be used as the main signal, yet the system can use additional sensors and data to increase its accuracy.

USE-CASE EXAMPLES

OCCUPANT SAFETY

- Density Mapping
- Seat-Occupancy
- People Counting
- Abandoned Child/Person
- Abandoned object
- Smoke/Fire Detection
- Person with/without a Mask
- Person and Group Proximity

OCCUPANT SECURITY

- Violence/Anti-Social Detection
- Threat Detection (person running)
- Tampering Detection
- Person Re-identification

VEHICLE PROTECTION AND USE

- Wheelchair, Pram, Bicycle, Scooter Detection
- Vandalism Detection
- Improper Use
 - Smoking
 - Alcohol
 - Drugs
 - Nudity
 - Sex
 - Weapon
- Littering

ARCHITECTURE

