A complete ITS
Spatial Intelligence Solution

Intel, Outsight and Advantech have partnered to showcase how Intel-based edge compute can provide AI capabilities by enabling sensor fusion.

outsight

Outsight's **Shift LiDAR Software** is a comprehensive Spatial AI solution designed for a wide array of ITS applications.

The software uses the most advanced 3D LiDAR data processing techniques to provide real-time accurate tracking of vehicles and pedestrians, while ensuring the highest levels of privacy.

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intel.

Intel® SceneScape is a multimodal scene intelligence software framework for monitoring and tracking use cases.

SceneScape fuses camera and LiDAR pre-processed data to create a 4D semantic digital replica by ingesting inferenced detections from cameras and mapping them onto an abstraction layer.
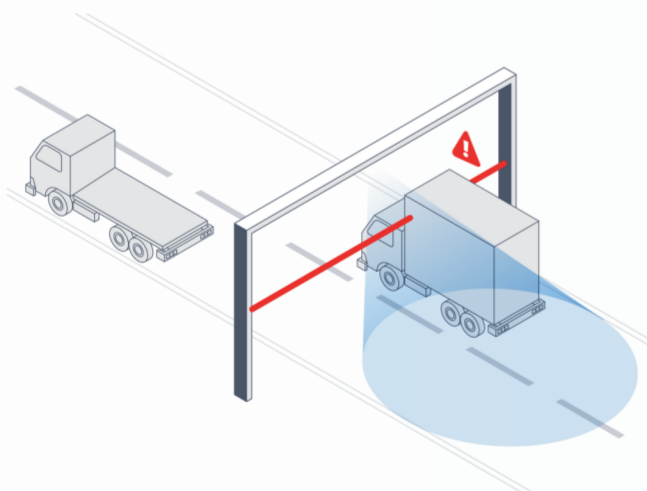
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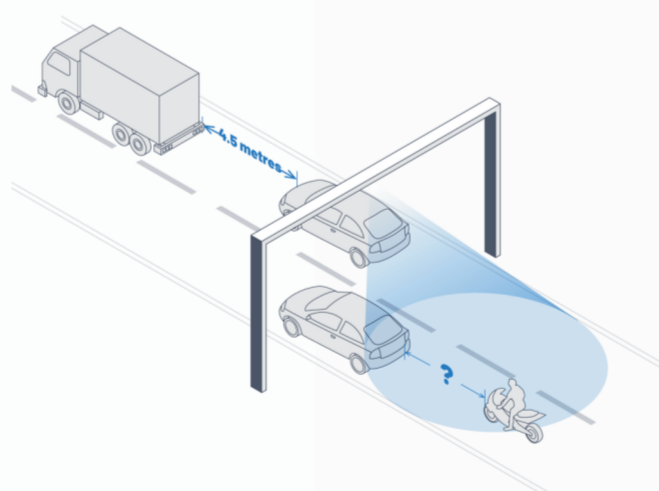**ADVANTECH**
Enabling an Intelligent Planet

Advantech is the world's largest Industrial PC company, offering a diverse portfolio of edge computers with high performance and rugged design.

Advantech, with partners like Outsight and Intel, can enable technologies for the future of ITS, whether it being road infrastructure, connected vehicle, or more.
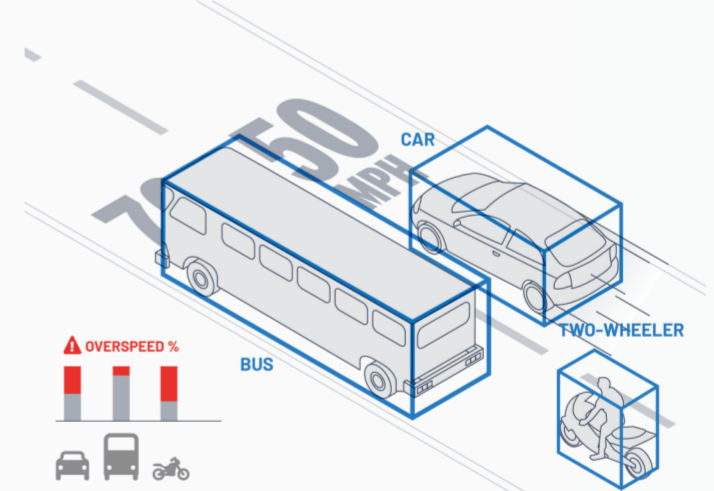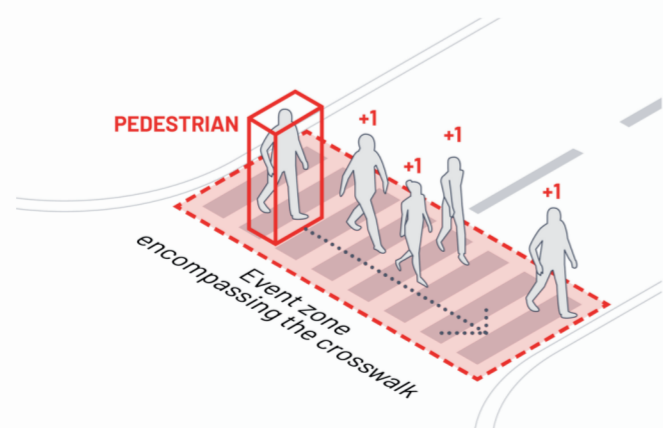
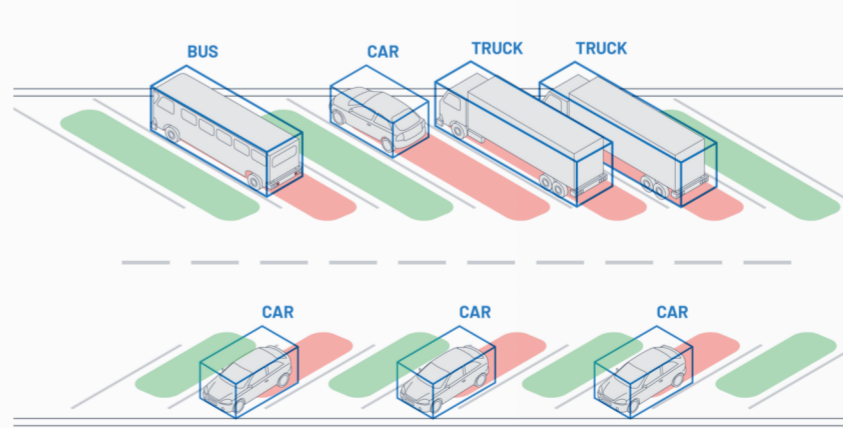# SAMPLE USE CASES

Automatic Incident Detection (AID)

Safe Distance Monitoring

Traffic Flow Measuring, Tolling & Analytics

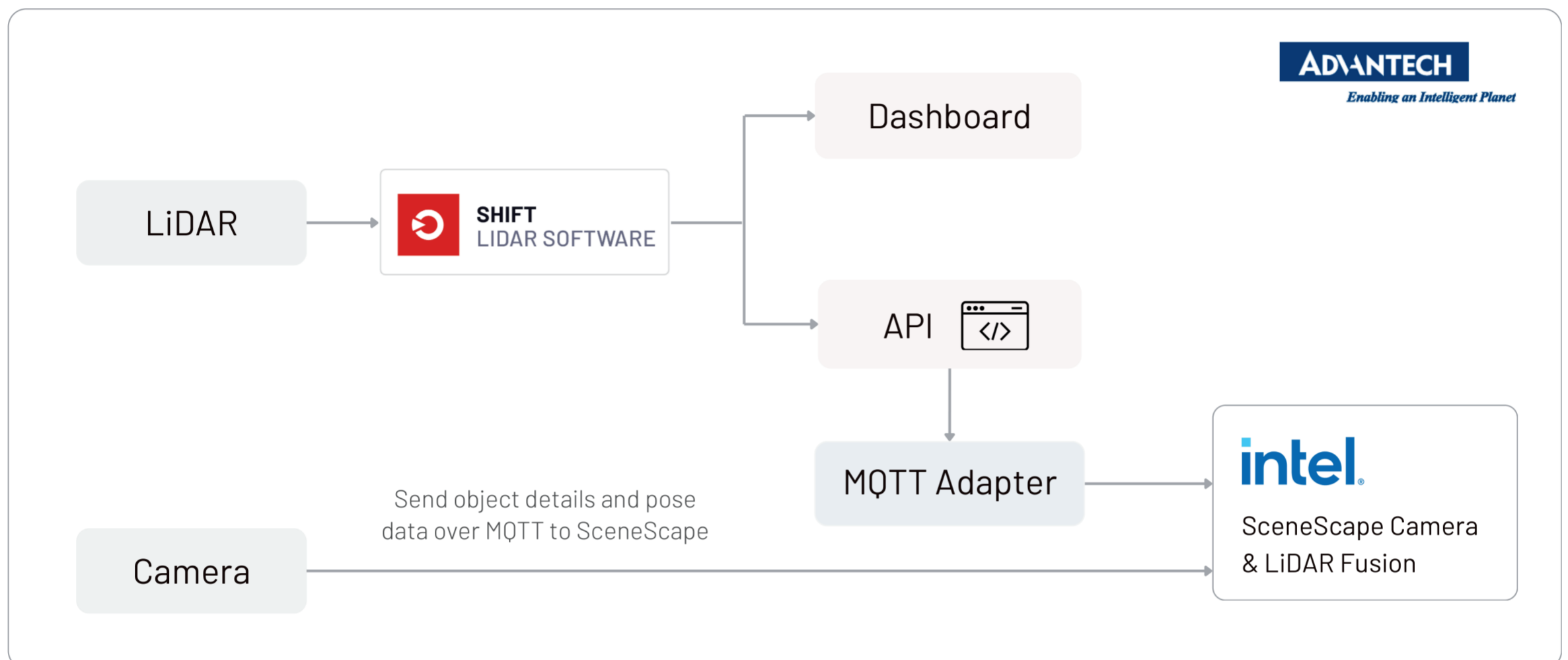**Vulnerable Road User (VRU) Safety**

Parking Occupancy Monitoring

HOW **IT WORKS**

We leverage the unique value of 3D LiDAR data to track the exact position and movement of each individual Car & Person. Intel® SceneScape Scene Controller analyses the LiDAR data and camera data to place objects in the scene as well as trigger events for them.

KEY **CAPABILITIES**

Multimodal sensor tracking

Flexibility to use audio, vision, LiDAR, RF, and environmental sensors per your unique needs.

Standards compliant solution

Standards based solution ensuring connectivity with multiple applications.

Fully on-premises installation

On-premises without cloud dependence to give you complete control of your data.

Scene nesting for larger areas

The solution enables a hierarchy of scenes for nesting scenes within larger area by managing a unique scene and easy-to-use scene coordinate system with exactly one scene parent for each sensor at any given time.

Situational context & awareness

Associate multimodal sensor input to the scene and utilize sensor and location attributes. For example, the position of a smart camera in a building allows for mapping detected objects into building coordinates.

Intel Geti support

Intel® SceneScape is compatible with the Intel Geti platform so that you can create and train custom AI models that enable better monitoring of people, high-value assets, and important areas within your space.