



An Intel
Company

Mobileye

Мировой лидер в создании системы помощи водителю для предотвращения аварий и технологии автономного вождения.



A taste of our technology



A taste of our technology

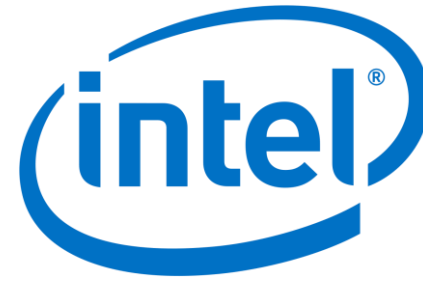




In 1999, Prof. Amnon Shashua and Mr. Ziv Aviram found Mobileye and harness the power of computer vision for automotive safety



2014: Publicly traded on the NYSE (MBLY)



2017: An Intel Company



2021: BMW Group and Mobileye Team Up to Bring Fully Autonomous Driving to Streets



2007: First Camera/Radar Fusion – Volvo



2011: First camera-only FCW



2015: - First camera-only AEB - 10 Millionth Chip



2016: First camera-only full speed Adaptive Cruise Control (ACC) on Nissan ProPILOT

2017: REM™ mapping launch: Two million vehicles collecting data by YE 2018



Автономное вождение

Представьте себе автономное
будущее ...

Our Technology

Our System understands the driving scene

- Pedestrians
- Lane Markings
- Vehicles
- Traffic Signs
- Land Marks
- Traffic Lights
- Holistic Path
- Drivable Path

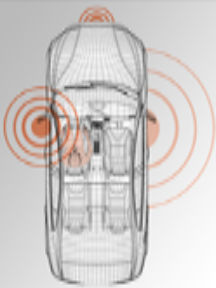


The ADAS Road to AD Reality

ADAS

Human driver monitors environment

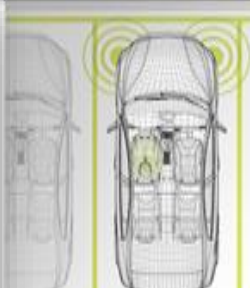
UP TO LEVEL 02



**NO
AUTOMATION**



**DRIVER
ASSISTANCE**



**PARTIAL
AUTOMATION**

AUTOMATED

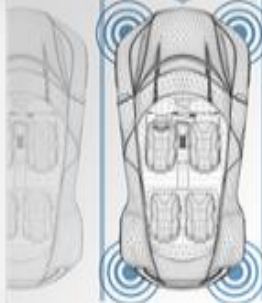
Vehicle system monitors environment

LEVEL 03



**CONDITIONAL
AUTOMATION**

LEVEL 04



**HIGH
AUTOMATION**

LEVEL 05



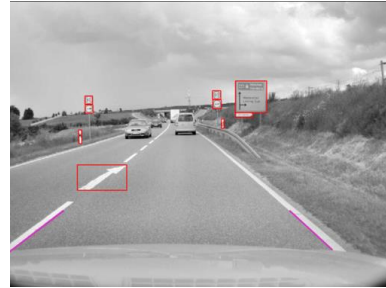
**FULL
AUTOMATION**

Как мы делаем это реальным

Три столпа автономного вождения



Считывание и распознавание

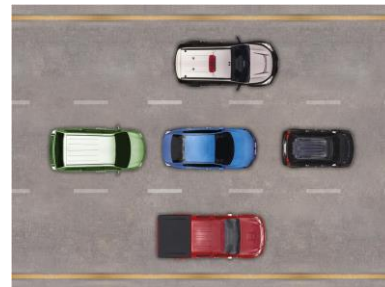


Картографирование



Правила вождения

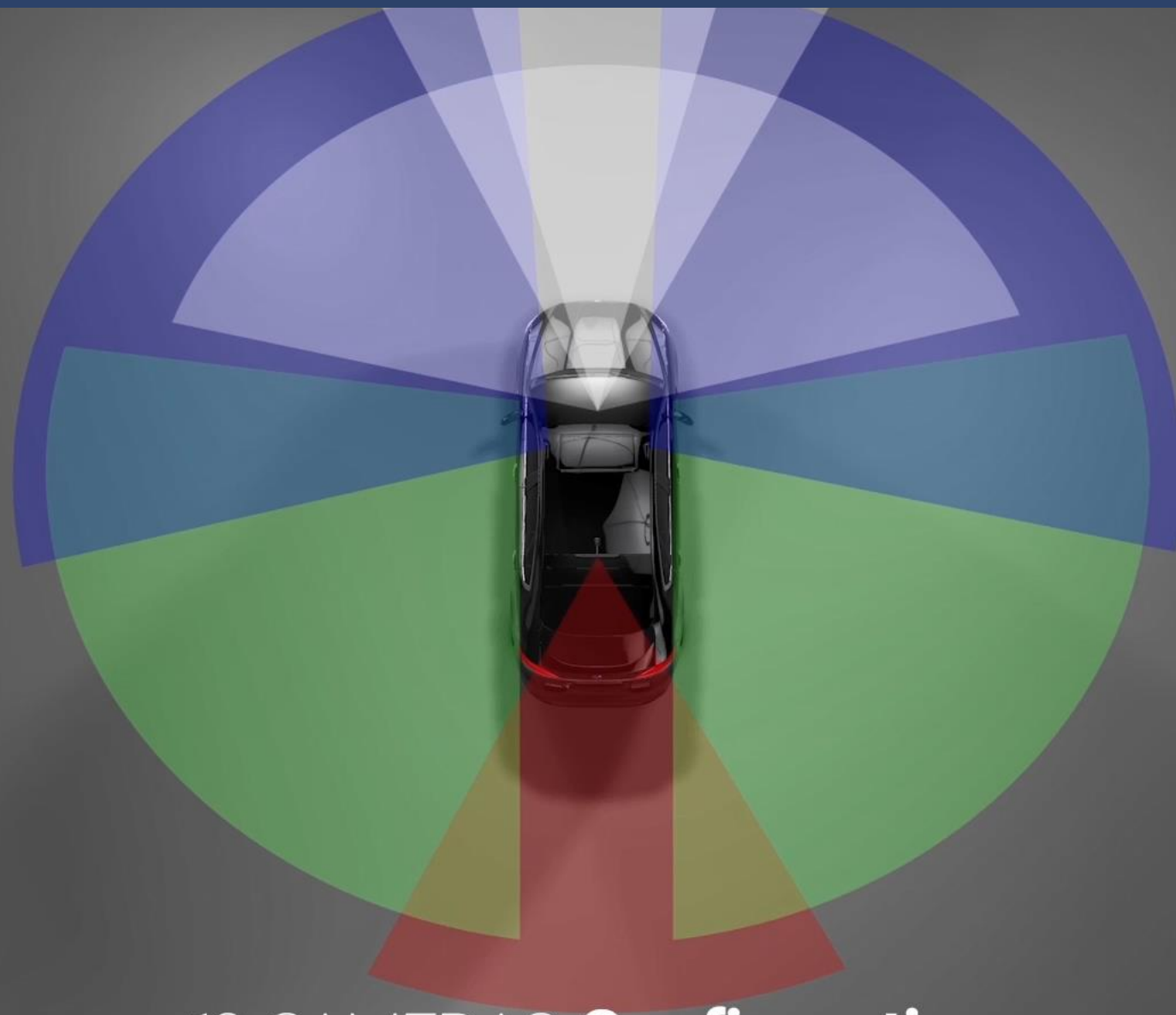
REM



Responsibility-Sensitive Safety

Считывание и
распознавание

360° awareness



12 CAMERAS **Configuration**

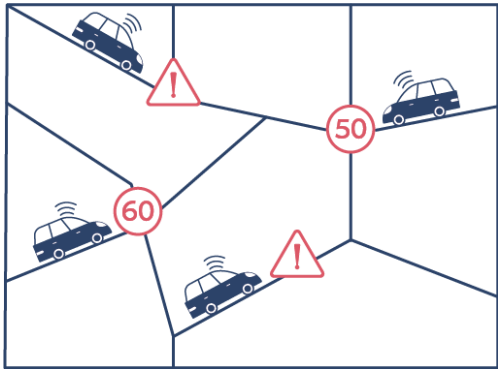
Считывание и распознавание

Entire roadscape

- Pedestrians
- Lane Markings
- Vehicles
- Traffic Signs
- Land Marks
- Traffic Lights
- Holistic Path



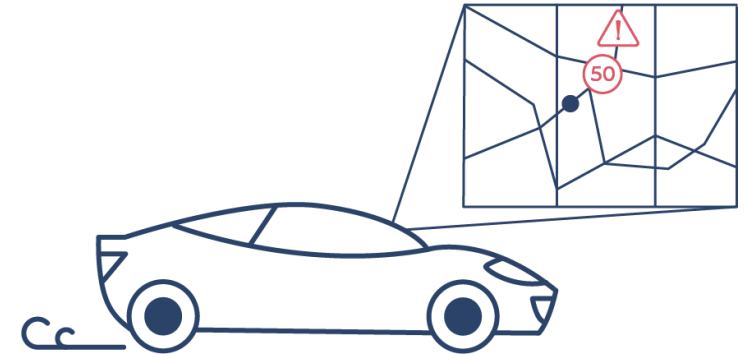
REM™ Stages



HARVESTING



AGGREGATING



LOCALIZATION

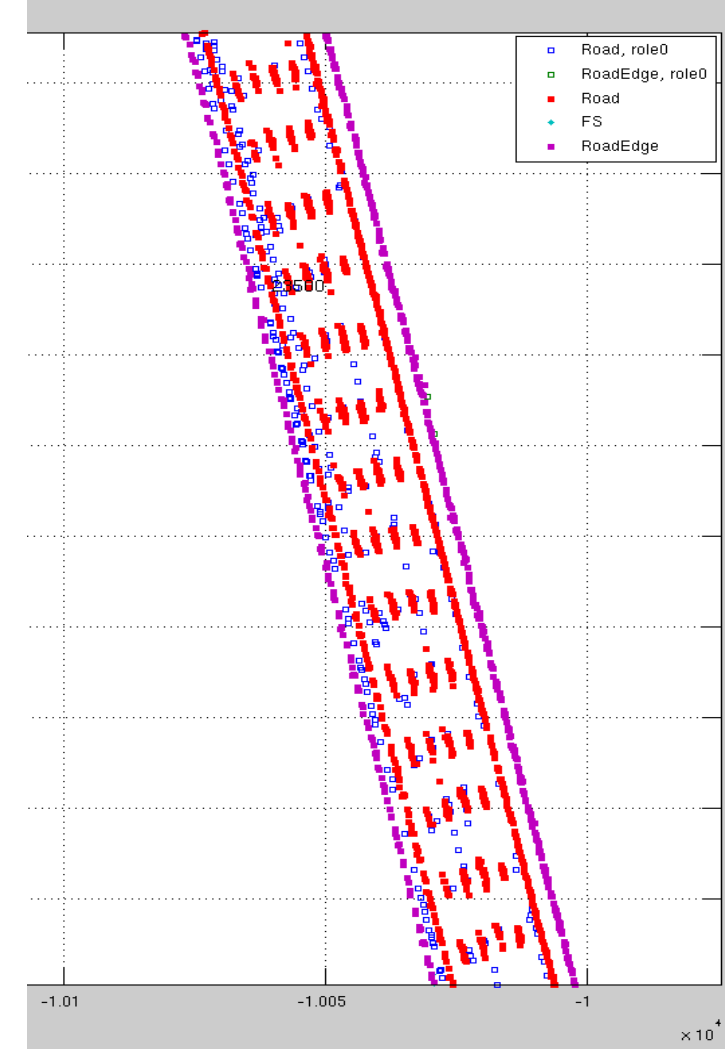
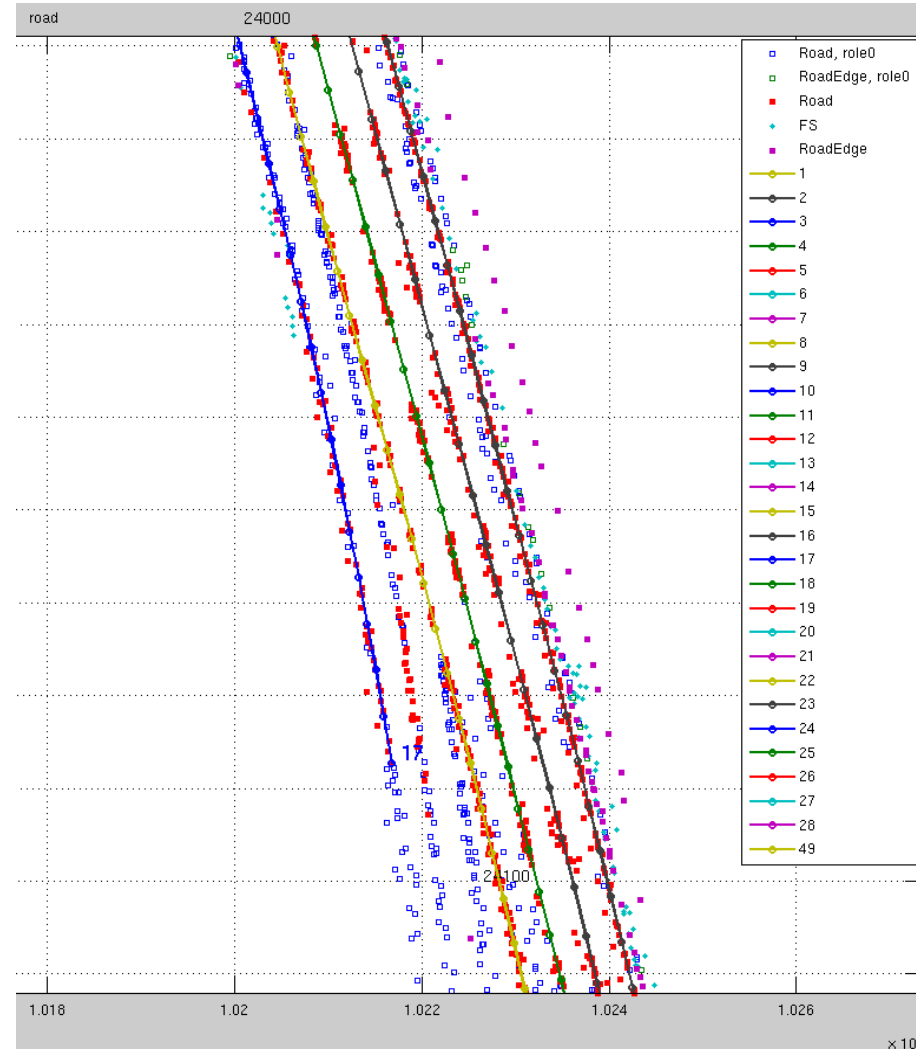
REM™ Harvesting



REM™ Aggregation

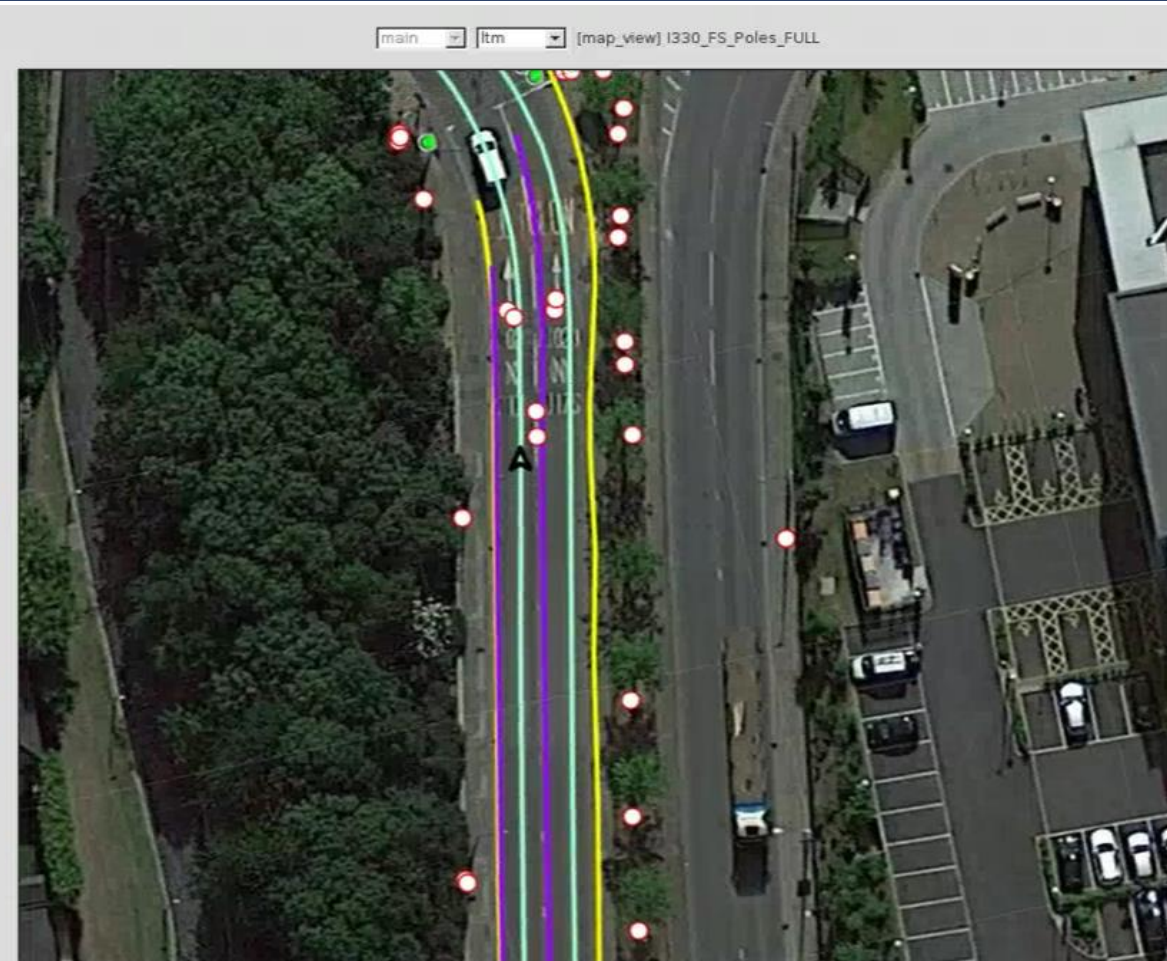


Roadscape data is aggregated to create HD roadbooks distributed to autonomous vehicles in map tiles

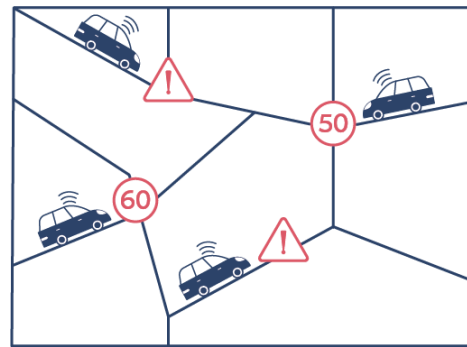


REM™ LOCALIZATION

Redundancy for sensors



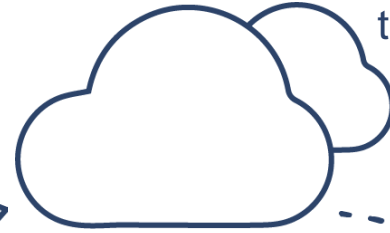
Mapping REM™ Summary



1. HARVESTING

Collecting Road Segment Data crowd-sourced via vehicles equipped with Mobileye

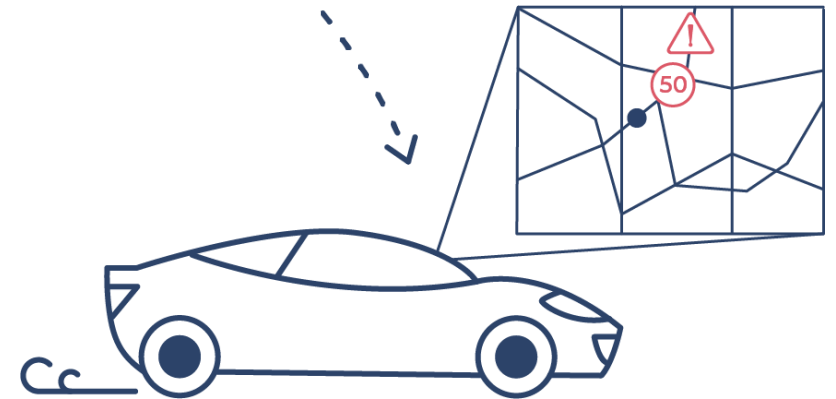
2. Anonymizing & encrypting roadscape data



3. AGGREGATING

Generating HD crowdsourced road-book for the autonomous vehicle

4. Map tiles distributed to AVs



5. LOCALIZATION

Localizing the car within 5cm accuracy in the road book.

Driving Policy

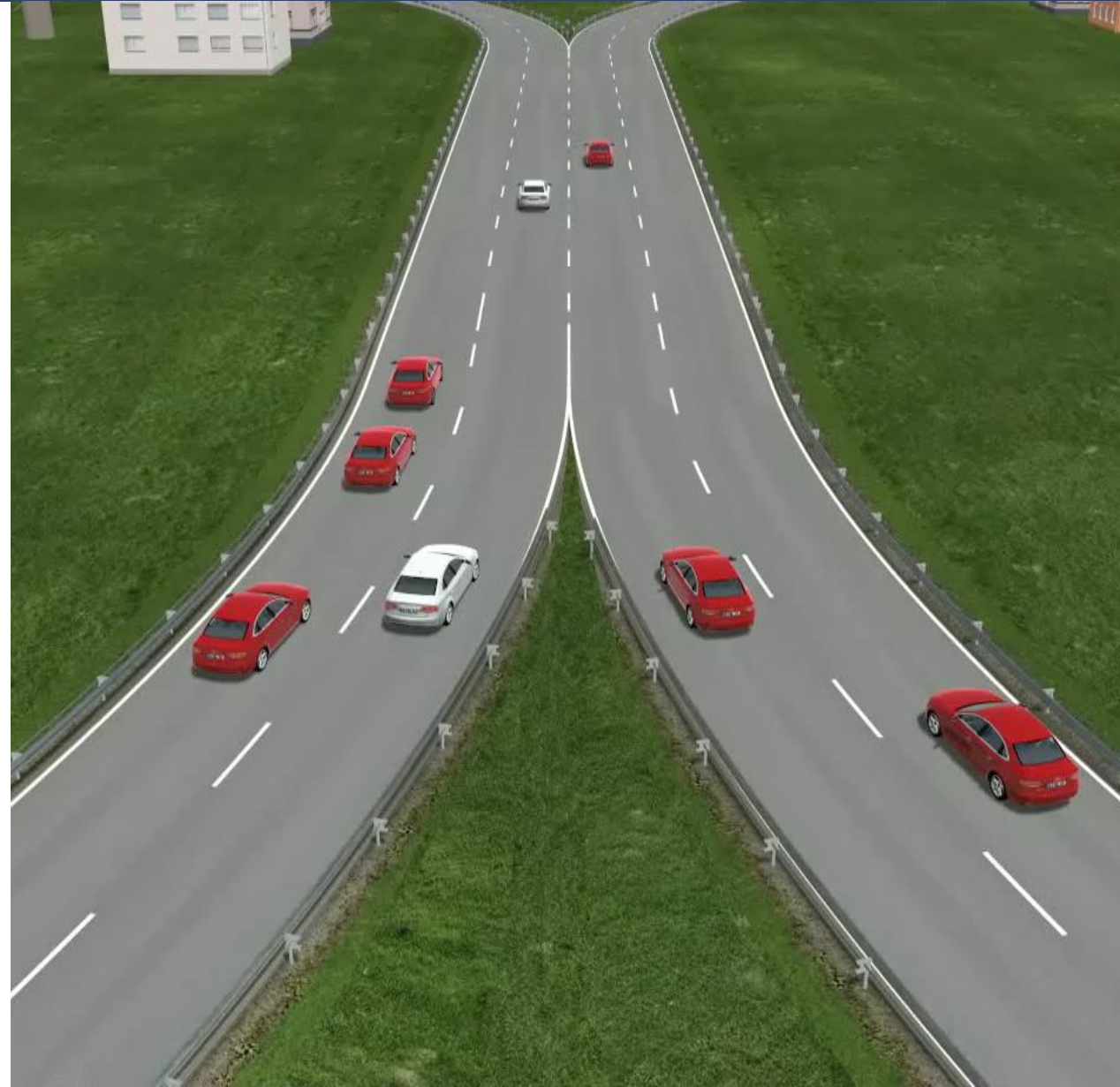
Negotiating the road with human-like intuition



Driving Policy – Teaching Human Intuition

Deep learning to “learn” the decision making process through exposure to data:

- Training the vehicle system through increasingly complex simulations
- Rewarding good behavior and punishing bad behavior.

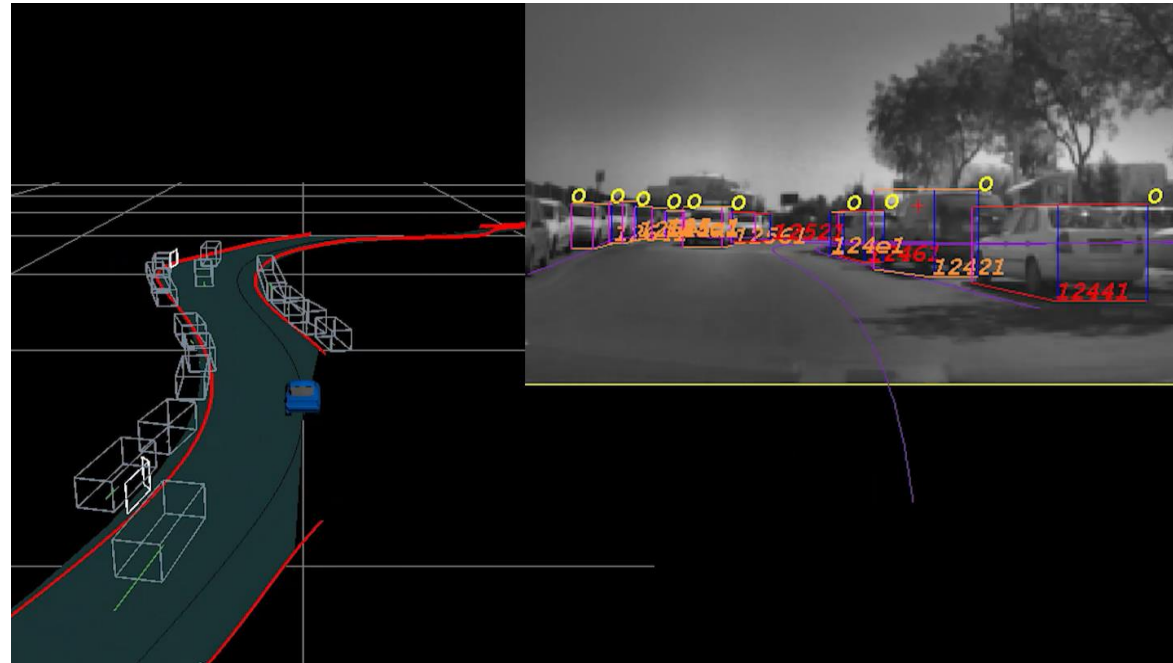


How all the pillars work together with RSS?

Sensing + REM + Driving Policy

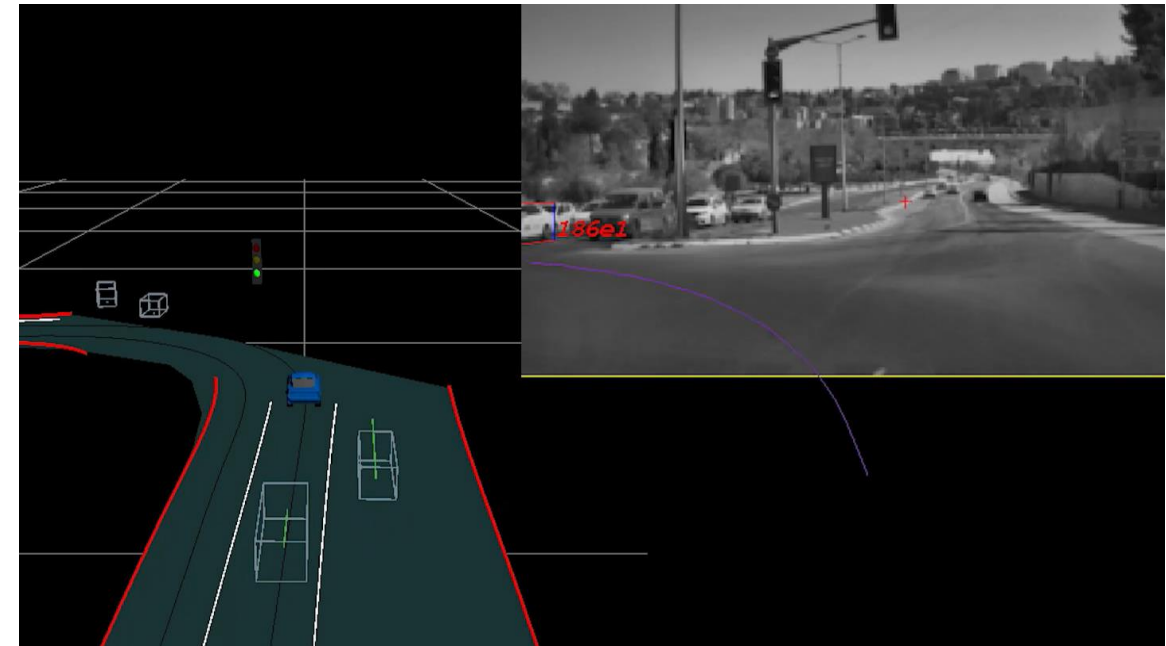
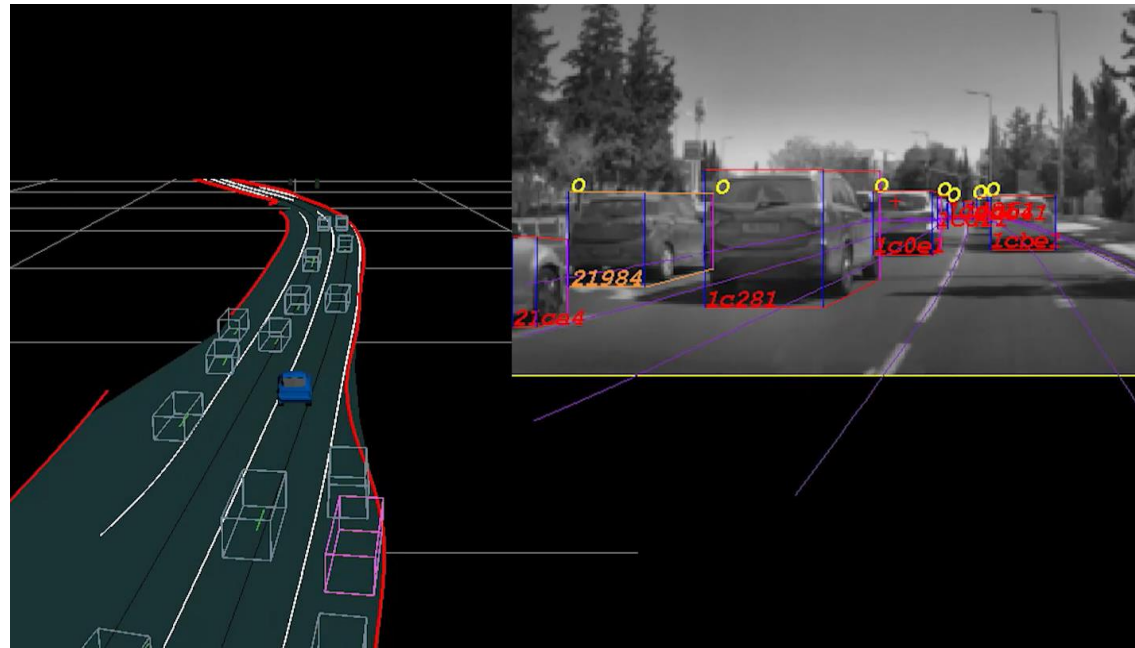


Assertive Driving with RSS



How All The Pillars Work Together With RSS?

Assertive Driving With RSS

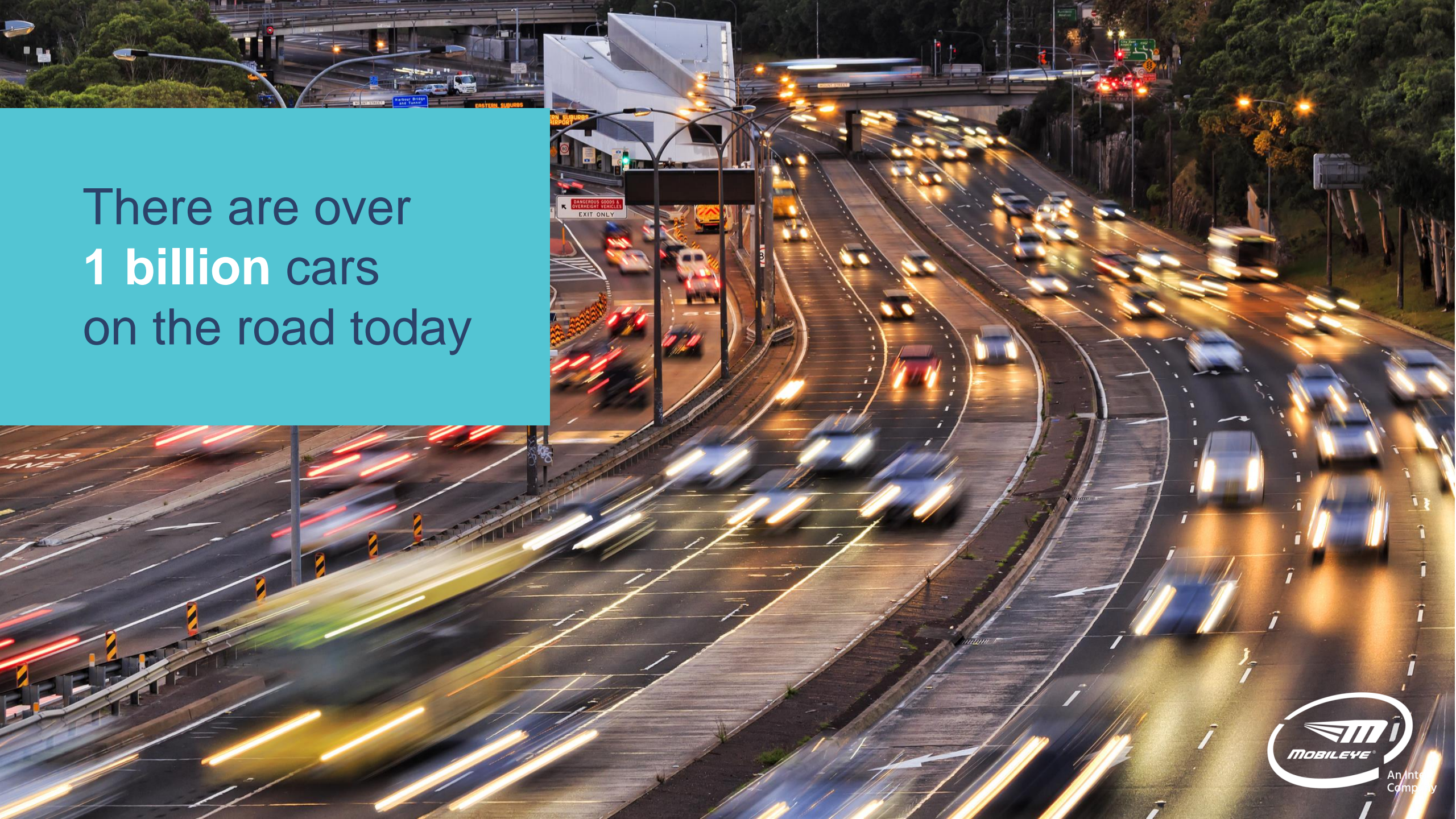


Intel and Mobileye Begin Testing Their Autonomous Fleet in Jerusalem





Aftermarket



There are over
1 billion cars
on the road today



An Intel
Company

25M+
Vehicles with
Mobileye
Technology.



Solutions for any Fleet



**Mobileye
6**



**Mobileye
Shield+
TM**

Single Camera & dashboard display (ME 6)



- One-time easy installation
- No subscription fees



Lifesaving Features



Forward Collision
Warning



Pedestrian
and Cyclist
Warning



Lane Departure
Warning



Intelligent
High Beam
Control



Headway
Monitoring
& Warning



Speed Limit
Indication

Forward Collision Warning



Pedestrian & Cyclist Collision Warning

