

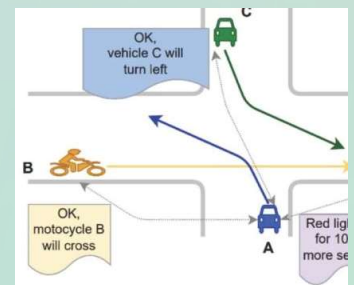
SMARTEDGE is a European project on semantic low-code programming tools for edge intelligence, with **use cases in manufacturing, automotive, and healthcare**. SmartEdge seeks to dynamically integrate decentralized edge intelligence through a semantic-based collaboration among edge devices in a cross-layer toolchain, facilitating seamless and real-time distribution of autonomous intelligence swarms.

AUTOMOTIVE



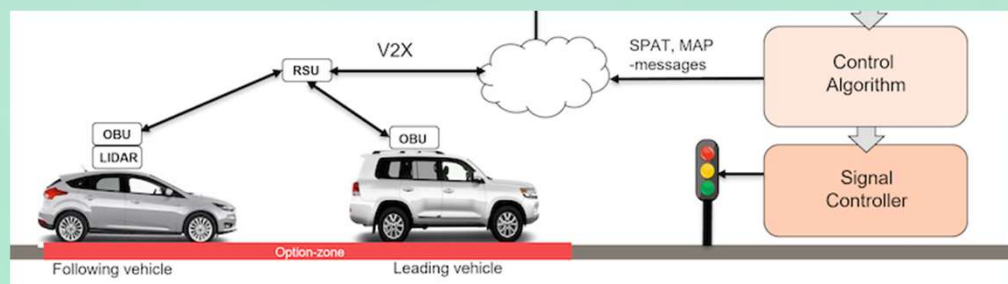
COOPERATIVE PERCEPTION FOR DRIVING ASSISTANCE

Generating accurate and comprehensive test cases for ADAS involves capturing the behaviour of various road users using diverse and heterogeneous data sources. SmartEdge is pioneering advancements in automated driving by enabling technologies for generating test cases. It combines existing knowledge with real-time traffic data to improve the quality, comprehensiveness, and consistency of these test cases.



PREVENTING REAR-END COLLISIONS BY ENHANCING ROAD INTERSECTION SAFETY

Rear-end collisions are a major road safety problem, particularly at intersections with traffic lights. Using swarm intelligence, SmartEdge allows



Rear-end collisions are a major road safety problem, particularly at intersections with traffic lights. Using swarm intelligence, SmartEdge allows for a new approach to tackle the problem through connected and cooperative traffic management. The raw data from the sensors is transformed into a holistic picture of the real-time traffic situation (digital twin, DT) including the type, position, speed and direction of each road user, including pedestrians and bicycles.

