

ADAS and Automated Vehicles

Applus+ IDIADA offers complete **services for ADAS and automated vehicles through the entire development cycle**, from concept phase to final validation. These services include complete support for function implementation, combining functional requirements expertise, software development processes, hardware integration experience and state-of-the-art simulation and testing tools.

Our work is proven through successful customer projects and public demonstrations.



We provide **comprehensive experience** for all systems on the market:

Full support addressing the whole development cycle:

- **Benchmarking for vehicle and system evaluation**
 - Complete vehicle level
 - Sensor and data fusion level
- **Function specification and system requirements**
 - [User, functional and performance requirements](#)
 - HW / SW specification
 - Targets setting
 - Traceability tools according to automotive standards

Multi-Car Collision Avoidance project:

The Multi-Car Collision Avoidance (**MuCCA**) project was a world first, demonstrating **real-time cooperative collision avoidance by full-sized automated vehicles**. This worked through vehicle-to-vehicle messaging and completely new control algorithms. It ran on our own IDAPT high-performance ECU platform with GPU, integrated V2V radio, RTK satellite positioning and comprehensive I/O, aimed at diverse CAV applications.

CAVRide project:

This is a **level 4 self-driving site taxi** with connected back-end support for ride-hailing via a mobile phone app. The same vehicle has supported the development of the novel vehicle-in-the-loop validation technique.