

ADAS Research Laboratory



Overview

The automotive industry is one of the largest spheres of economy in the world, producing millions of units a year, and employing many engineers as well as graduates in a wide variety of fields. Significant improvements in vehicles functionality, safety, performance, and comfort were made in the past decades. Thus, modern automotive electronic systems contain a complex network of electronic control units (ECU), sensors and actuators are distributed and embedded in almost any vehicle.

ADAS Lab is developed to best fit one of the main engineering challenges to position Armenia as an ADAS center in the region.

List of Labs

1. Automotive Radar Research Lab
2. Environment Simulation for Lidars
3. Machine Vision and Deep Learning
4. Engine Control Unit HIL Lab
5. Infotainment System Lab
6. Sensor Fusion System Lab

Features

- Prototyping Automatic Parking and Emergency Steer Assist algorithms
- Detection of multiple targets, conversion of object to target and of target to track
- IP development for embedded platforms, model optimization routine automation
- Differentiate spots, lines, detected light signal shape
- Automotive radar target simulation and signal characterization research
- Automotive LiDAR target simulation and signal characterization research
- Camera and object detection research
- ECU algorithm research and development
- Sensor Fusion System research and development