Camera-based Advance Driver Assistance Systems or ADAS solutions by AllGo Embedded Systems Pvt. Ltd.

Enable safer drives.
We support OEMs and Tier 1s build personalized and safer cars.

When driving wasn't intelligent.
ADAS solutions by AllGo.
✓ Detects if the Driver is alert or drowsy.
✓ Constantly monitors the eye status (Open/Close).
✓ Generates an alert when the driver is drowsy.
✓ Robust for any type of eyes, color, gender or origin.
✓ Robust for various angles.
✓ Robust for various lighting conditions.
✓ Works with sunglasses and normal glasses.
✓ Works with IR camera and normal camera.
✓ Supported on ARM, DSP, GPU, ARM, x86
✓ Performance 8-10 fps.
✓ Detects if the Driver is alert OR distracted.
✓ Constantly monitors the face position status.
✓ Generates an alert when the driver is distracted.
✓ Robust for any type of color, gender or origin
✓ Robust for various angles.
✓ Robust for various lighting conditions.
✓ Works with IR camera and normal camera.
✓ Supported on ARM, DSP, GPU, ARM.
✓ Performance 8-10 fps.
✓ Driver Detection & Authentication
✓ In Car Personalization
  > Personalized IVI experience
    - Custom UI
    - Calendar, Phone Book
    - Favorite music, FM channels
  > Seat adjustments, AC & Fan settings
✓ Based on Video Analytics the FACE is recognized in < 2 seconds.
✓ Supported on ARM, DSP, GPU, ARM.
Building block IPs owned by AllGo.
Face detection
Face Recognition
Pose estimation
Eye status detection
HOG, SVM, Ada boost
ADAS applications – The development roadmap
Eye ball tracking analyses gaze direction of the eyes.

Supports In Car personalization like Radio Channel or AC controls.

The technology is robust for all sizes, colours and shapes of eyes.

Tracks eyeballs constantly and in real time.
✓ Building blocks - Fish eye correction and video stitching.
✓ Obstructions around the vehicle are displayed on the head unit.
✓ Robust on any car model.
✓ Building blocks are bird's eye view and obstacle detection.
✓ Navigates the driver while parking.
✓ Robust for any car model.
✔ Building block - Lane marking detection, vanishing point detection and lane departure measurement.
✔ Makes sure the driver keeps the vehicle in a road-lane boundary.
✔ Alert issued if the driver starts drifting from the lane.
✔ Robust in all weather conditions, unclear lane markings, partial occlusion caused by other vehicles.
✓ Building blocks - Lane departure and obstacle detection.
✓ Warning issued to the driver based on the car's speed and the object in front.
✓ A forward looking monocular camera used.
✓ Robust in all weather conditions and at all speeds.
✓ Obstacle detection caters to issuing pedestrian detection warning signal if there is a threat of the pedestrian being hit.
✓ Robust while pedestrian is stationary or even in motion.
✓ Robust irrespective of variations in appearance or height of pedestrians.
Supporting building blocks.
Fish eye correction
Video stitching
Obstacle detection
Eyeball Tracking
HOG, SVM, Ada boost
Vanishing point detection
Lane marking detection
Lane departure measurement
HOG, SVM, Ada boost
Founded in Feb 2005.

Team Size of 140 people.

Current Footprint

✓ Engineering team based in Bangalore with floating model for on-site support.

✓ Registered offices in US and Singapore to relocate and support projects.

Planned expansion in 2015

✓ Smaller engineering support team across global locations supported by engineering team in Bangalore.

✓ On-site engagement on a resource rotation model.

✓ Expansion to other locations based on customer engagements.

Vision – “Be a leading developer of embedded technology solutions that add high value to customers”
✓ Providing Automotive Infotainment and Video Analytics solutions since 2005
✓ Over 8 MN vehicles in the market today run AllGo Developed IVI SW
✓ Worked on production programs with Top Tier 1 companies
✓ Working with OEM companies on future Technologies and POC programs
✓ Actively engaged in the Automotive Ecosystem
  ✓ Member of Genivi Alliance
  ✓ Core Member of Car Connectivity Consortium
  ✓ Steering Committee Member of Auto Grade Linux initiative
✓ Apple iAP Adjunct Licensee
✓ Active Partnership/engagement with other eco system vendors
✓ Automotive Infotainment IP & Services.
✓ Camera-based Advanced Driver Advance Systems.
✓ Video Analytic solutions.
✓ System integration, software development services.