



iGP: Autonomous Car

iGP Module: Sensor Fusion Platform for Obstacle Detection in Autonomous Vehicles

Lead Supervisor: Dr. Mohsen Rashwan, Dr. Maged Ghoneima

Different sensors such as Radar, LiDAR, Stereo Cameras and Ultrasonics are used for obstacle detection and depth estimation. To increase the accuracy and improve reliability, multiple sensors are used at the same time. This project module will focus on building a sensor fusion platform for obstacle detection to be embedded in autonomous vehicles. It will fuse Lidar, Camera and radar sensors to produce a 2D map of the surroundings of autonomous vehicle for 10m *10 m with 1 cm resolution. This map will then be passed to the ECU to take the necessary decisions while the car is in motion