

**iGP: Autonomous Car**

**iGP Module: Rear View Mirror Replacement to Enable Deep Learning for Autonomous Driving**

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Deep learning is one of the hottest fields in the market and it will boost Autonomous driving, which is the future of vehicle design in the next 15 years. The main pillar, that all of this is based on, is the artificial intelligence built into these cars to be able to navigate, avoid obstacles and improve safety and client appreciation. In addition to the many sensors to be built into these cars, a platform needs to be built in for deep learning that enables this required artificial intelligence.



Students in this graduation project will build a hardware replacement for the rear view mirrors that includes a stereo camera and other sensors. This device will be used to collect hours of sensor recordings as actual drivers roam the streets of Cairo. In parallel, the team will be building a deep learning platform that will use this recorded data to develop the needed intelligence for cars to navigate and operate themselves on the street.