## **Salvum Cars**

Eldaly, Hanin (School: Menofya STEM School)
Hadhoud, Sama (School: Menofya STEM School)

If a neighbor is killed in a car accident, do you sell your car and stop driving? Nearly 1.3 million people die in road crashes each year, on average 3,287 deaths a day[1]. The critical reason, which is the last event in the crash causal chain, was assigned to the driver in 94 percent (±2.2%) of the crashes[2]. There are a lot of causes that lead to car accidents like (reckless Driving, changing lanes quickly, speeding over the limit and medical conditions etc.). Decision error such as driving too fast for conditions, too fast for the curve, false assumption of others' actions, illegal maneuver and misjudgment of gap or others' speed accounted for about 33 percent (±3.7%) of the crashes[2]. There are a lot of prior solutions tried to solve this problems like crash deterrent system and Machine Vision System[3] etc., however. Road traffic crashes are predicted to become the seventh leading cause of death by 2030[4]. You can't feel how horrible is the situation unless you put yourself in it. So we try to make system that force you to avoid the accidents. "Car with extra safety features". We control the maximum speed that the car can reach depend on the speed limits of the streets. We also made a communication system between cars to share information that can help avoid accidents. We made an automatic control when a sudden car appears by determining what the best way to go. We made a float system for the car. We made a complete system that avoid any type that may cause accidents made by human. If we apply this system we predict that the number of these death would be reduced by 58.7 %.