4+1

Banchiero, Francesca
Pinna, Margherita
Papa, Alessandra

4+1 is a project that implements four functions created to improve the safety of driving plus one which improves the efficiency of the cars affecting positively pollution and energy consumption. It is a breathalyzer test: when the driver tries to turn ignition, if the car remains stationary for a preset time, he must blow into a straw. If the alcohol level in his breath is higher than the legal limits the car will not start and the system will send an SMS containing the GPS Coordinates of the car to a preset number. Also, the system is provided with an IR system meant to comunicate when the car is braking to the cars behind. With this system, the traffic lights can send their current status to every car. Thanks to this system it is possible to reduce the possibility of accidents , pollution and energy consumption. It was needed to determine the standard values. We performed various tests and processed the results in order to remove any possibility of mistake. The team continued to work on the project to make it more reliable and cheater-proof. At first, the project included just one sensor, now it takes effort of three sensors and a turbine. In conclusion, the system now is capable of accomplishing every function it was meant to do and it is very reliable.

Awards Won: