Smart Alarm

Chkheidze, Irakli
Donadze, Vakhtang

It is estimated that 1.3 million people die from the car accidents every year and most of the accidents are caused by the drivers who unintentionally fall asleep. We are eager to add our modest contribution to solving this problem by creating a “smart alarm”. We come up with this idea during the lesson of Biology when we were studying physiological sleep of the person. The process of transition from sober to asleep is accompanied by pulse dropping at the moment when a person is just prepare to fall asleep. We decided to create a gadget that would detect this change and will be able to wake up a napping driver. Our gadget consists of two main parts, the counter of the pulse and alarm. Both of them are stored in the bracelet, but it is also possible to place the equipment in the steering wheel or in the board computer. The working principle of the equipment is quite easy: the special pulse counter is calibrated on the normal pulse and then measures the result from the starting point of driving. Pulse counter identifies pulse dropping and gives the signal to the alarm. At first the alarm makes sound signal, then vibrato motor is switched on and the alarm starts vibration. Our gadget has another function as well, if the pulse is higher than usual, the alarm warns the driver and actually advises the driver to calm down or to slow down the car.