**INTELLIGENT HELMET SYSTEM**

**ABSTRACT:**

The main aim of the system is to develop a smart helmet for the bikers to provide safety and security.

**PURPOSE:**

People prefer motorcycles over car as it is much cheaper to run, easier to repair, easier to park and flexible in traffic. The rate at which number of two wheelers in India is rising is 20 times the rate at which human population is growing. In such scenario fatalities are only going to rise if things do not change fast. The risk of death is 2.5 times more among riders not wearing a helmet compared with those wearing a helmet. In order to provide safety while driving two wheelers this is being developed.

**HELMET SECTION:**

**MICRO CONTROLLER**

**(AT89S52)**

**LCD DISPLAY**

**(16\*2 LINES)**

 **POWER SUPPLY**

**IR SENSORS**

**VOICE IC**

**SPEAKER**

**ALCOHOL SENSOR**

**MOTOR**

**DESCRIPTION**

In the helmet section, the IR sensors detect the presence of helmet on the user head; the alcohol sensor detects the alcohol levels in the biker body. The microcontroller continuously monitors the sensors values. If the biker doesn’t wear the helmet the IR sensors will inform the microcontroller. In case if the biker doesn’t have the helmet, the ignition key doesn’t allow the bike to start.

**HARDWARE TOOLS:**

* Micro controller (AT89S52)
* L293D
* Voice IC
* Buzzer
* Alcohol sensor
* IR sensors

**SOFTWARE TOOLS USED:**

* Keil IDE Compiler
* ISP.
* Embedded c

**RESULT:**

By making use of sensor network a system can be developed to provide safety to bikers.