

TELANGANA GOT TECH TALENT

Fatal Road Accidents

Issues:

Primary reasons for the road accidents could be:

- Driver dizziness
- Driving under the influence of alcohol or drugs
- Non-licensees as drivers
- Overlook of the sign board instructions and many more.

The proposed system provides the following solutions:



DRIVER DROWSINESS DETECTION

Remedies:

- Regular monitoring of facial expressions and eyes of the driver.
- Detection of drowsiness invokes the system to issue a signal to the driver either by a voice command or a vibration alert.
- Forceful parking of the vehicle on the road side is enabled upon alert ignorance.

Remedies:

- Electronic nose technology is used to detect the odd odors like drugs, alcohol etc.,
- Detection of any such sour smell from the driver, locks the vehicle.



DRIVER SMELL DETECTION



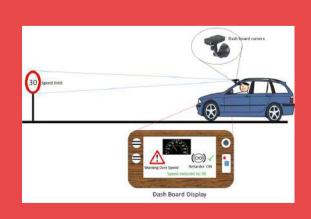
DRIVER LICENSE DETECTION

Remedies:

- Preventing the non-licensees drive the vehicle.
- Optical character recognition (OCR),
 Barcode scanning descry identity
 status of individual.

Remedies:

- LIDAR or stereo camera embedded device can be positioned on the left side of the vehicle to create a detailed 3D map of the environment in front of the vehicle.
- It observes the obstacles in its path like sign boards, upcoming traffic signals, etc., and issues corresponding voice commands.



SIGN BOARD IDENTIFIER

We propose to develop a single device capable of performing the above-mentioned tasks to improve safety.