The Smart Dashboard

Problem
According to a recent study by the National Highway Traffic Safety Administration, over 80% of automobile related accidents are related to driver distraction. Our project consists of three sub-systems that will attempt to reduce the number of accidents by increasing driver awareness on the road.

Our Solutions

Flashing Brake Lights
This system will detect when the deceleration of the vehicle is above a desired level. When this occurs, it will pulse the brake lights to alert following vehicles.

Speed Limit Indicator
This system will display the speed limit of the current road on the speedometer. This should reduce speeding by providing the driver with both their speed and the legal limit in one location.

Driver Awareness Sensor
This system will monitor the driver and detect when the driver is falling asleep. If it detects drowsiness, the system will notify the driver to take corrective action.