

## Literature survey

### 2. A General machine - Learning Framework for On-Road Vehicle Recognition and tracking. (2010)

#### Introduction:

WORLDWIDE automotive accidents injure between 20 and 50 million people each year, and at least 1.2 million people die as a result of them. Between 1% and 3% of the world's domestic product is spent on medical care, property damage, and other costs that are associated with auto accidents . As a result, over the years, there has been great interest in the development of active safety systems among vehicle manufacturers, safety experts, and academics.

The design of active safety systems presents many difficult challenges. A key requirement of active safety systems is that they accurately, reliably, and efficiently identify dangerous conditions . Often, we would like an active safety system to help avoid collisions by detecting lane departures , pedestrians , or other vehicles .

It is widely recognized that computer vision is a critical technology for the development of intelligent vehicles

#### Advantages:

1. Using a vehicle tracking device can help you to circumnavigate these obstacles.
2. Fuel accounts for the highest expense in utilizing a vehicle,
3. There are numerous fleet businesses in India today. And the competition between them is very tight.

#### Disadvantages:

1. Poor performance under bad pavement conditions on recognition and tracking.
2. Installation personnel safety issues are occurred.
3. Requires multiple detectors for a location tracking.
4. Water penetration affects performance of vehicle.
5. Extensive effort for installation.

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