

# **LITERATURE SURVEY ON INTELLIGENT VEHICLE DAMAGE AND COST ESTIMATOR FOR INSURANCE COMPANIES USING ARTIFICIAL INTELLIGENCE AND INFORMATION GATHERING**

The vehicle damage detection task is one of the most vital activities in the vehicle insurance and vehicle rental industries. The systems of these kinds are used to identify the damage of a vehicle once an accident happens by the driver and also by the insurance company to detect and determine a suitable amount as per damage and vehicle rental companies to inform about the damage of a vehicle to the customer. The core technique here is object recognition. So once vehicle body damages, the driver does not have to wait until the insurance company calculates the appraisal, he/she himself can get a brief idea as to how much will it cost to recover the damage. Once the image is uploaded, the system will process the image and identify the dent, scratches, shattered glasses, etc. Next, it is classified into the various severity classes by considering the features of the vehicle like the make, model and the year of manufacture. Later, the severity generated as per damage image is mapped with the cost rules, which are constructed based on various properties of the vehicle such as the make, model and the year of manufacture. In the end, the customer gets notified with a level of damage severity and an average cost from which the damage can be recovered. So to solve this problem, we are applying the concept of image analysis, which is used to gain more accurate damage result of any exterior part of the car and provide suitable liability.

## **Level of damage:**

Damaged car can be defined by their incidence. We think about each damaged part into small, average, severe. The categorization of the damaged car levels as follows.

- Small Damage - creaks in headlight.
- Average Damage - Damage in car doors.
- Severe Damage - damage of air bags.

## References (Bibliography):

- “Automatic car insurance using image analysis”. Aniket Gupta, Jitesh Chogale student dept of Information Technology Engineering, Pillai College of Engineering, Maharashtra, India.
- “Car Damage Assessment for Insurance Companies”.Mandara G S1 and Prashant Ankalkoti2,PG Student, Department of Master of Computer Application1,Assistant Professor, Department of Master of Computer Application2,J N N College of Engineering, Shimoga, India