

**TEAM ID:PNT2022TMID12510    DATE:30.10.2022**

## **ABSTRACT**

Nowadays, a lot of money is being wasted in the car insurance business due to leakage claims. Claims leakage Underwriting leakage is characterized as the discrepancy between the actual payment of claims made and the sum that should have been paid if all of the industry's leading practices were applied. Visual examination and testing have been used to may these results. However, they impose delays in the processing of claims. The aim of this project is to build a model that can detect the area of damage on a car. The rationale for such a model is that it can be used by insurance companies for faster processing of claims if users can upload pics and the model can assess damage be it dent scratch from and estimates the cost of damage. This model can also be used by lenders if they are underwriting a car loan, especially for a used car.

**Title :** Applying image analysis to auto insurance Triage

## **Methodology :**

Image analysis and pattern recognition are applied to automatically identify and characterize automobile damage.

## **Advantages :**

Because of the advancement of image analysis and pattern recognition technologies, the auto insurance industry could significantly benefit.

## **Disadvantages :**

The drawback is that the automobile damaged can be analyzed only having white background otherwise it will be not able to give the desired results.

## **Author/ Publication Year :**

Li Ying & Dorai Chitra, 2012

**Title :** Image based automatic vehicle damage detection

**Methodology :**

This approach requires 3D computer aided design (CAD) models of the considered vehicle to identify how it would look if it were undamaged.

**Advantages :**

Automatically detecting the damage of the vehicle using photographs clicked at the accident site is extremely functional as it can greatly decrease the rate of processing insurance claims, and it will also provide greater

**Disadvantages :**

Vehicles have very reflective metallic bodies the photographs taken in such an uncontrolled environment can be expected to have a certain amount of inter object reflection. Application of standard computer vision

**Author/ Publication Year :**

Srimal Jayewardene', 2013

**Title :** A Secure AI- driven Architecture for Automated Insurance Systems: FraudDetection and Risk Measurement

**Methodology :**

Blockchain, data analysis, machinelearning, AI for damage identification.

**Advantages :**

Proposed classifiers ensure not only the best accuracy in detecting fraudulent claims but also can classify different types of fraud forinsurance unlike the existing solutions.

**Disadvantages :**

The major drawback of the proposed model is that it only identifies the physical visible damage and not of the internal or the interior damage.

**Author/ Publication Year :**

M.Wassel,2019

**Title :** Car damage detection and classification

**Methodology :**

CNN model is trained on ImageNet dataset. After fine tuning the dataset, transfer learning with L2 regularization is Applied

**Advantages :**

Pre-trained VGG model not only detect damaged part of a car but also assess its location and severity.

**Disadvantages :**

Transfer learning and regularization can work better than those of fine tuning.

**Author/ Publication Year :**

Phyu Mar Kyu, Kuntpong Woraratpanya, 2020

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