Intelligent Vehicle Damage Assessment & Cost Estimator for Insurance Companies
Top 3 Ideas-Problem Statement.

1.) Research on Intelligent Vehicle Damage Assessment System Based on Computer Vision.

At present, under the guidance of the new generation of information technology, the rapid accumulation of data, the continuous improvement of computing power, the continuous optimization of algorithm models, and the rapid ris e of multi-scene applications have made profound changes in the development environment of artificial intelligence. In this paper, based on the demand of automobile insurance claims and intelligent transportation, combined with abu ndant basic data and advanced machine vision algorithm, an intelligent damage determination system of □ Artificial Intelligence + Vehicle Insurance□ is constructed. This paper first introduces the functions of the intelligent damage assessment system. Secondly, it discusses the realization path of each functional module in detail, and finally puts fo rward the vision for the future.

2.) Research on Intelligent Vehicle Damage Assessment System Based on Deep Learning.

The rapidly expanding automobile industry highly backs the equally fast-growing auto insurance market. Altho ugh until now this industry has been solely based on traditional ways to make repair claims. In case of an unfortunat e accident, the claims for the car damage needs to be filed manually. An inspector is required to physically analyze t he vehicles to assess the damage and obtain a cost estimate. In such situation, there is also the possibility of inaccurat e settlements due to human errors. Automating such a process with the help of machine learning and remote usage w ould make the process a lot more convenient for both sides of the damage, increasing productivity of the insurance c arrier and satisfaction of the customer.While the technology is yet to achieve the highest possible levels of accuracy, above is a proof of concept of the appication of Deep Learning and Computer Vision into automating the damage ass essments by building and training Convolution Neural Networks.

3.) Automatic assessment of damage and repair costs in vehicles using Image Recognition.

A system and method are provided for automatically estimating a repair cost for a vehicle. A method includes: receiving, at a server computing device over an electronic network, one or more images of a damaged vehicle from a client computing device; performing image processing operations on each of the one or more images to detect exter nal damage to a first set of parts of the vehicle; inferring internal damage to a second set of parts of the vehicle based on the detected external damage; and, calculating an estimated repair cost for the vehicle based on the detected exter nal damage and inferred internal damage based on accessing a parts database that includes repair and labor costs for each part in the first and second sets of parts.