LITERATURE SURVEY:

INTELLIGENT VEHICLE DAMAGE ASSESSMENT & COST ESTIMATOR FOR INSURANCE COMPANIES

TITLE:

Research on intelligent vehicle Damage assessment system based on computer vision

AUTHOR:

This is the article written by Zhu Qianqian.

YEAR:

August 22,2018

TECHNIQUE FINDINGS:

In this based on computer vision, the demand of automobile insurance claims and intelligent transportation, combined with abundant basic data and advanced machine vision algorithm, intelligent damage determination system of "Artificial intelligence + vehicle Insurance " constructed.

ADVANTAGES:

Intelligent image algorithm has high precision, the accuracy rate is 87.3%.

The speed of survey and damage determination is fast.

It improves insufficient police force.

Avoid traffic congestion and secondary accidents.

DISADVANTAGES:

Leads to high cost of risk investigation.

The leakage problem in the process of damage fixing is difficult to control.

To accident site, the slow payment process.

Fixed price issues to certain extent reduce customer satisfaction with the insurance companies

APPLICATIONS:

Deep convolutional neural [1,2].

Have led to series breakthrough for image classification.

With the development of deep learning.

FUNCTIONS OF INTELLIGENT DAMAGE ASSESSMENT SYSTEM:

Accident investigation.

Intelligent image range assessment.

Damage results output.

Vehicle Insurance antifraud

TITLE:

CAR DAMAGE ASSESSMENT

AUTHOR:

Shubhi

YEAR:

July 13, 2020

TECHNIQUE FINDINGS:

Computer vision and Deep learning techniques to accurately classify vehicle damage to facilitate claims triage by training convolution neural networks.

ADVANTAGES:

The rapidly expanding automobile Industry highly back the equally fast growing auto insurance market.

An inspector is required to physically analyze the vehicles to assess the damage and obtain a cost estimate.

The technology is yet to achieve the highest possible levels of accuracy.

DISADVANTAGES:

The inaccurate settlements due to human errors.

The industry has been solely based on traditional ways to make repair.

APPLICATIONS:

With a under range of dataset featuring multiple components of the car.

With a highly expansive data set containing.

Using there secure and durable hardware.

The applications can also be updated to recommend the user of policies pertaining to the specific accounts and other insurance benefits.

CHALLENGES:

The field of computer vision is yet developing and not mature modular phone camera, quality images.

Car insurance settlements claims require near perfect accuracy to ensure the customer is not frauded in the process.

Such a process will require a certain level of manual control filter to avoid flooding of fraudulent insurance claims.

TITLE:

    VEHILE DAMAGE ASSESSMENT

AUTHOR:

    Founded in 2020 in Tag X is an industry-leading data annotation / labeling company creating high-quality data assets for Artificial Intelligence leveraging AI and humans in the loop.

YEAR:

    August 29 ,2022

TECHNIQUE FINDINGS:

    Computer vision for vehicle damage assessment.

ADVANTAGES:

    It can paint a fuller more accurate picture.

    It is the computer vision technology can extract analyze and provide insight to aid and speed up the inspection process benefitting both insurers and the insured.

    In the claims process, imagery using computer vision both before and during the accident provides tremendous visual data to analyze the weather lighting, scene, speed, and traffic.

    By working with partners to access AI, data engineering digital technologies.

    DISADVANTAGES:

    It is only used to computer vision system.

    It will be required to identify and analyze objects and scenario in endlessly environments.

APPLICATIONS:

    Insurers need to reimagine their systems, operations, partnership to successfully adopt computer vision.

    It will involve collecting and processing vast amounts of data.

    Inspections data in the form of pictures, videos, and annotations and the security in place to safely store, access and share data among the key stakeholders.

SOLUTION:

    Finding a proper data set.

    Preprocessing image data sets is a crucial step in speeding up and obtaining better training results for models.

    Data annotation technology to fully realize its potentials Insurance AI developers need to feed their machine learning algorithms with accurate data.

TITLE:

DIGITAL TRANSFORMATION IN CAR INSURANCE INDUSTRY

AUTHOR:

Article and Solution group Max Galaktionov with the 15 years of expertise.

YEAR:

Two weeks ago, 2022

TECHNIQUE FINDINGS:

Digital Transportation and Machine learning technologies used in the Car Insurance Industry.

ADVANTAGES:

Car Insurers need to perform many operations.

Storing of huge volumes of data generated by different parties.

DISADVANTAGES:

The variety of car increases as well as number of insurance claims.

It is used car rental services.

SOLUTION:

Outstanding data capabilities.

Expanded range of services

Remote car diagnostics.255222

Enables service personalization.

Car damage assessment remotely with the help of AI.

BASED CAR DAMAGE DETECTION:

Data processing are user image vehicle, analyze car model, car angle, locate damage car parts, prepare report.

POSSIBILITIES:

License plate recognition.

Damage location and severity scratches, the whole car.

Car color recognition.

Fake damage detection.

Car model recognition.

Damaged parts of the car helpful on computer vision.

Segmentation of damaged car parts.

AI POWERED CAR DAMAGE ASSESSMENT SOLUTION:

Choose the Training data.

The choice of the right architecture

Data security.

Need for human environments.

MY CHOICE OF DAMAGE DETECTION INSURANCE COMPANIES:

It is gathering data.

Data segmentation.

Data licensing.

Data annotation.

INSURANCE COMPANIES OF BUSINESS PERSPECTIVES:

Decrease the level of fraud.

Improving signing speed and efficiency.

CAR RENTALS:

Decrease operational cost.

Increase retention rate.

Increase customers happiness.