

**VELAMMAL COLLEGE OF ENGINEERING AND TECHNOLOGY**

**DEPARTMENT OF ELECTONICS AND COMMUNICATION  
ENGINEERING**

**NALAIYATHIRAN**

**INTELLIGENT VEHICLE DAMAGE ASSESSMENT & COST  
ESTIMATOR FOR INSURANCE COMPANIES**

**Team ID:** PNT2022TMID23164

**Team Size:** 4

**Team Leader:** Nithyakalyani S

**Team member:** Harshini V

**Team member:** Sneha R

**Team member:** Akshaya Vairalaxmi R

**TOPIC:** INTELLIGENT VEHICLE DAMAGE ASSESSMENT & COST  
ESTIMATOR FOR INSURANCE COMPANIES



LITERATURE SURVEY

S NO.	TITLE	AUTHORS	ABSTRACT	DRAWBACKS
1.	Research on Intelligent Vehicle Damage Assessment System Based on Computer Vision	Zhu Qianqian ,Guo Weiming ,ShenYing and ZhaoZihao	In this paper, based on the demand of automobile insurance claims for intelligent transportation, combined with abundant basic data and advanced machine vision algorithms, 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 forward the vision for the future.	The drawback is to explore the innovation of insurance technology of 'AI + Vehicle Insurance.



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2.	Damage Assessment of a vehicle and Insurance Reclaim.	Vaibhav Agarwal ,Utsav Khandelwal, Shivam Kumar, Raja Kumar, Shilpa M	By reducing loss adjustment costs, improvements in the First Notice of Loss and the speed with which claims are examined and evaluated might save a lot of money in the automobile insurance claims process. Car damage is automatically identified and classified using advanced picture analysis and pattern recognition technology. A technique that compares before-and after-accident car images to automatically detect the damaged location.	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.
3.	Assessing Car Damage with Convolutional Neural Networks	Harit Bandi,Suyash Joshi,Siddhant Bhagat,Amol Deshpande	Manual estimation of damages in fields like construction, vehicular accidents has been the mainstay of the insurance business. However, such methods are replete with biases and inaccurate estimations. This paper deals with estimating car damage, primarily with auto insurers as our key potential customers. For this purpose, three distinct Transfer Learning approaches are used which detect the presence of damage, location, and severity of the damage.	The drawback here is Driver behavior monitoring.Machine learning enhanced solutions help in monitoring driver's behavior.



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4.	Car Damage Assessment for Insurance Companies	Mandara G and Prashant Ankalkoti	The data contains three classes namely train, test and validation. Trained image is compared with the test image. Car has to be trained for many times by using epochs which means how many times the algorithm can work between the whole training dataset. In this graph they can take only two times of running the algorithm. Finally the comparison is completed lastly print the graph containing accuracy, validation accuracy, loss and validation loss.	Need for human involvement . Although the process could be absolutely automated, I still nedds human involvement to detect and avoid fraudulent insurance cases.
5.	Digital Transformation in Car Insurance Industry: Streamline Recognition of Car Damage Assessment	Max Galaktionov	Digital transformation and Machine Learning technologies enable automation which is actively been used in the car insurance industry. It enables quick vehicle damage detection, improves management,cuts employee expenses, and allows to improve the overall quality of service.	The challenge is Processing of big volumes of data. The insurers need to be able to quickly assess and analyze data from various sources and provide exact estimations.

