

# **20CS713 PROJECT PHASE 1-C9**

## **Damaged Car Detection using Multiple Convolutional neural networks with Flask Web app**

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## ABSTRACT:

Vehicles get damaged due to various reasons such as accidents, collisions, natural disasters, and wear and tear. The issue affects many businesses, including automakers, insurance companies, car rental companies, and individual vehicle owners. For insurance companies to file a compensation claim, they must quickly and accurately detect the damage to the vehicles involved in the accident. This project is designed to create an application to diagnose car damage using multiple CNNs and Flask Web. This project uses advanced image processing tools and machine learning algorithms to quickly analyze images and highlight damaged areas. The system uses the power of CNNs to accurately identify and describe various vehicle damages such as dents, scratches, and deformations from input images. Adding to the importance of CNN-based damage to pipelines, we created a web application using Flask that allows users to easily upload images and receive instant damage assessments. The system is divided into two parts: training the model and submitting the model to the website. Using this technology has the potential to improve the insurance process, improve the vehicle's performance, and increase customer satisfaction through speed. Speed up and streamline the process.

## PROBLEM STATEMENT:

Car damage detection is an important task in many applications, such as insurance claims processing and vehicle inspection. However, it can be a difficult task, especially when the damage is minor or difficult to see. The problem is significant, as inaccurate or delayed damage assessments can lead to increased costs for insurers, longer processing times for claims, and customer dissatisfaction.





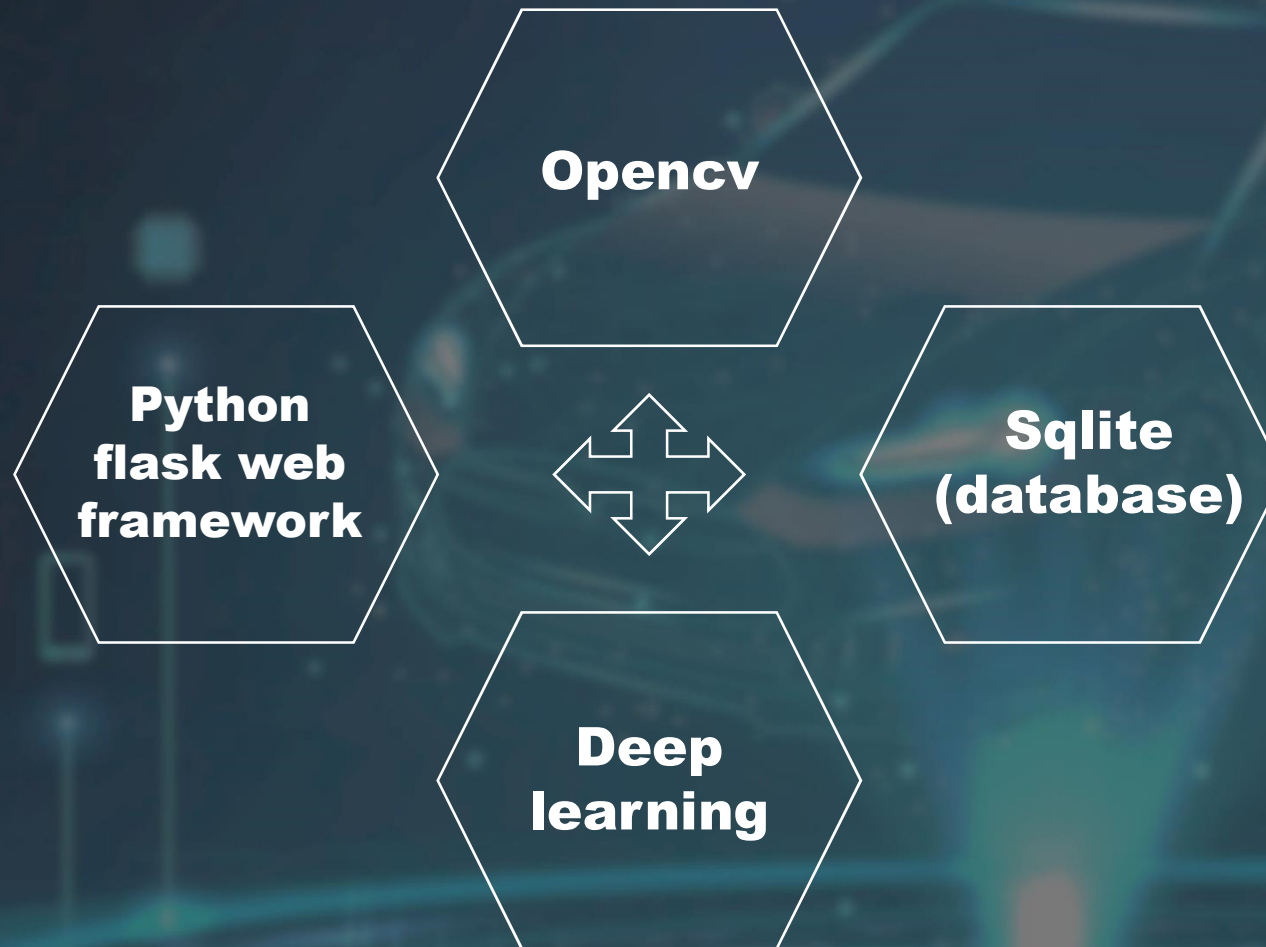
## PROBLEM OBJECTIVES:



To develop a system that can accurately and reliably detect damaged cars using multiple Convolutional Neural Networks (CNNs). CNNs are a type of machine learning algorithm that are well-suited for image classification tasks. CNNs have been used to successfully detect damaged cars in a variety of settings.

The goal of this project is to develop a system that can accurately and reliably detect damaged cars using multiple CNNs. The system should be able to detect damage of all types and severities, even in challenging conditions such as poor lighting or occlusion.

## TECHNOLOGY STACK:



A futuristic car is shown in a dark, blue-toned environment. The car is surrounded by glowing digital lines and particles, suggesting a high-tech or artificial intelligence theme. The car's body is partially transparent, revealing internal components. The overall aesthetic is sleek and modern.

**THANK**

**YOU...**