Road Health Monitoring Network

Ministry/ Organization name : AICTE - MIC
Problem Statement : Student Innovation
Team Name : Classified
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Road Health Monitoring Network

Use of accelerometer and a robust deep-learning model which adapts to car's dynamics to detect potholes and dangerous irregularities accurately. Collected data will update the live road health map which will guide users to navigate safely while driving on such roads and give authorities sufficient data to repair roads.

Real time priorities will be assigned to roads on parameters like busyness, road health, type of traffic and also if the road is closed for repair will be indicated. In starting phase it will be implemented in cabs as they operate on all major roads nationwide.

TECH STACK :Keras, React, and Java.

Use Cases:

1. Creating a nation-wide real-time roadways health report card for swift maintenance.
2. Avoiding accidents, water clogged roads and unnecessary damage to vehicles.
3. Improved overall transit speed and road aesthetics.

What separates us from others ?

Accelerometer is a fairly **cheap sensor** and generates **very less data** as compared to a camera & other sensors.

Smaller data footprint helps in **fast processing** of data by **DL Model** on **entry level GPUs** and easy transfer of data to and from areas with weaker internet connectivity. Improving overall **speed** and **cost.**