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Patent Search

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Abstract:

The present disclosure relates to image processing techniques and more particularly to method and system for managing road asset using smart road asset management system. The system may capture real time images of road infrastructure using one or more image capturing units and classify the real time images into road asset category based on image classifier model. System may determine fault associated with each of the classified real time images, based on predefined image processing rules and determine dimensional parameters associated with the determined fault using one or more sensing units. Further, the system may predict overall material required for rectifying the determined fault based on the determined dimensional parameters and output the predicted overall material required for rectifying the determined fault on a user interface of an electronic device. The system may estimate overall cost value required for the predicted overall material required for rectifying the determined fault.

Complete Specification

DESC:TECHNICAL FIELD

[0001] The present disclosure relates to image processing techniques. More particularly, the present disclosure relates to method and system for managing road asset using smart road asset management system.

BACKGROUND

[0002] Background description includes information that may be useful in understanding the present invention. It is not an admission that any of the information provided herein is prior art or relevant to the presently claimed invention, or that any publication specifically or implicitly referenced is prior art.

[0003] Generally, road asset management may be based on an analysis of road data related to inventory, condition, traffic, unit costs, road deterioration models, and the like. The data may be entered into a conventional Road Asset Management System (RAMS) that may allow the data to be analysed, and optimal budget levels and allocations to be determined.

[0004] However, the road asset management may not be trivial in developing countries, since bitumen and concrete roads constitute a significant problem for both citizens and government. In an instance, pothole, bleeding, block crack, edge crack, longitudinal cracks, ravelling and transverse cracks can create severe damage to the vehicles such as flat vehicle tyres, scratches, dents, leaks, and the like. Generally, estimation of dimensions of potholes, bleeding, block crack, edge crack, longitudinal ravelling, transverse cracks, and the like may be carried out manually by concerned agencies which may in turn require more manpower, equipment, time and cost.

[0005] Therefore, there is a need for a smart system that can accurately detect the cracks with the appropriate dimensions of the cracks, which helps in the estimation

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