

Road Roughness Analyzing System

Project Proposal
5th Semester Mini Project



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Project Title- Road Roughness Analyzing System

Project Information- The Road Roughness Analyzing System is used to obtain the condition of various roads or paths. The device is used for road analysis and to get prediction of road behavior.

Project Summary- Road Network in India contributes the most part in transportation and travelling. The travelers suffer great difficulties in traveling due to roughness and below standard condition of roads due to low maintenance. Road surveillance needs to be done frequently for their proper maintenance.

Road Roughness Index representing road condition (in numerals) needs to be calculated which will be depending on cracks/patholes on the roadway. In this way, with the road roughness index calculated one can judge the condition of the roadway.

Project Objective-

- Detect Patholes/Crack on the road
- Draw a relation between Roughness Index and Patholes and their orientation so that from the measured data Road Roughness Index can be calculated.
- Update Patholes/Cracks and their orientations on map.

Project Approach-

Approach is to detect the patholes/cracks via image processing system with HD images captured by GoPro Camera and measure their depth via Laser Scanners. For positioning the cracks use the GSM/GPRS system to get the latitude/longitude.

Devices/Equipments Required-

- GoPro Camera with USB Module
- 1-2 Laser Distance Scanner with USB Module
- GSM/GPRS USB Modem
- Vehicle for mounting these equipments and capturing the data