Abstract

Surveying highway and road for anomaly detection is a challenging task for the road transport authority in Bangladesh. Lack of sufficient budget and manpower makes this problem really hard. Moreover as a populated and developing country many more roads are being constructed each year. Routine maintenance cannot be conducted due to complex and costly road anomaly survey system. Here we propose a system that can be used to automate the road surveying system for anomaly detection. Road transport authority can easily be benefited from this automated system. Here we use GPS and accelerometer, an inertial sensor that can detect vibration while going on a car as our data source and use signal processing and Support Vector Machine to detect deteriorated road segments.

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**Index Terms**

Computer Science  
Pattern Recognition

**Keywords**

Road survey, Road anomaly, SVM, Pattern recognition.