PROJECT

Submitted by: Riya P D
Topic: Road Damage Detection using DNN
Guide: Mr.Nakulraj K R

About Project:

Keeping roads in a good condition is vital to safe driving. To monitor the degradation of road conditions is one of the important component in transportation maintenance which is labor intensive and requires domain expertise. Automatic detection of road damage is an important task in transportation maintenance for driving safety assurance. The intensity of damage and complexity of the background, makes this process a challenging task.
                        A deep-learning based methodology for damage detection is proposed in this project after being inspired by recent success on applying Deep-learning in Computer Sciences. Using convolutional neural networks to train the damage detection model with our dataset, here use the state-of-the-art object detection method, SSD(Single short Detector) and compute the accuracy and runtime speed on a GPU server. The SSD approach is based on a feed-forward convolutional network that produces a fixed-size collection of bounding boxes and scores for the presence of object class instances in those boxes, followed by a non-maximum suppression step to produce the final detections. At the end, we show that the type of damage can be distinguished into eight types with acceptable accuracy by applying the proposed object detection method.

PUBLICATIONS

1.Paper – Pothole Detection Methods
   Conference – ICICT 2018
   Journal – IEEE
   Status – Presented

2.**Paper** - A study on the methods for Attendance System using Fcae Recognition.
   Conference – ICICT 2018
   Journal – IEEE
   Status – Presented