Abstract

A clear visibility of the road ahead is significant concern for safe nighttime driving. However, high beams are utilized less than sufficient on the roads since drivers are afraid of dazzling others. Subsequently, the smart programmed control of vehicles front lamp is of incredible significance.

According to road accident surveys, majority of the accidents occur in dark. Visibility in dark is significant issue for safe driving. Therefore careless drivers continue using a high beam even though approaching vehicle is observed. These high beams create glare for approaching drivers which then causes temporary blindness. To solve this problem, nighttime vehicle detection has a great importance. This paper reviews various attempts made to solve the problem, need of study, currently implemented relevant systems and related work, different approaches to solve problem and various applications. The survey shows sensor based approaches cannot be used to satisfy real time requirements of a system. However, a simple and reliable solution needs to be developed so that, it can be implemented in each vehicle. An attempt has been made to
present an image processing based system that detects vehicles and selects ideal beam so that accidents due to temporary blindness can be reduced.

**References**

5. Sungmin Eum and Ho Gi Jung, Enhancing Light Blob Detection for Intelligent Headlight Control Using Lane Detection, IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, VOL. 14, NO. 2, JUNE 2013, pp 1003-1011.


Index Terms

Computer Science  Automated Systems

Keywords

Headlight control, Nighttime vehicle detection, beam control, Light blob detection, Low beam, High beam.