Abstract

Automation plays an important role in the universe. The automation is having more impact in vehicle. A pedestrian detection is required for advance driver assistance system and security surveillance system. The video is captured using camera which may fit in the vehicle dashpot or CCTV footage fitted in home or industry. The videos are converted into frames. The frames are analyzed and further pedestrian is detected using image processing techniques. In this paper, the review is carried out using the recent research work. Around 20 numbers of papers are taken for the review. The various techniques used in the pedestrian detection such as histogram oriented gradient method, SURF, SIFT, LDA are gathered using the review. The various classifiers required to identify the person or detecting the pedestrian are analyzed. The various hardware implementations used in the recent research is discussed. The recently achieved accuracy and error rate are analyzed using the review.

References


17. Victoria A. Banks, Neville A. Stanton, Catherine Harvey. 2014 Sub-systems on the road to vehicle automation: Hands and feet free but not ‘mind’ free driving, Safety Science, Elsevier, 505-514.


**Index Terms**

Computer Science  
Image Processing

**Keywords**

Security survilence, Modulating neural network, YOLO, Caltech, KITTY, INRIA