|  |  |  |  |
| --- | --- | --- | --- |
| Title | Face recognition based driver detection system | | |
| Author(s) Name | Farzana Arefin Nazira, Md Imriaz Uddin, Md Hafizuddin Raju, Shajnin Hossain, Md Naimur Rahman, MF Mridha | | |
| Contact Email(s) | firoz.mridha@aiub.edu | | |
| Published Journal Name | International Conference on Data Analytics for Business and Industry (ICDABI) | | |
| Type of Publication | Conference | | |
| Volume |  | Issue |  |
| Publisher | IEEE | | |
| Publication Date | 2021/10/25 | | |
| ISSN |  | | |
| DOI | 10.1109/ICDABI53623.2021.9655889. | | |
| URL | https://ieeexplore.ieee.org/abstract/document/9655889 | | |
| Other Related Info. |  | | |
|  | | | |

|  |  |
| --- | --- |
| Abstract |  |
| Face Recognition has emerged as a potential field in the Machine Learning domain due to the arrival of big data. Face detection technology has been used in real-life areas. Nowadays, it is essential to detect a driver’s face to find out the real driver of the vehicle with a valid vehicle driving license. In the paper, we proposed a system for driver face detection using OpenCV (Open source computer vision) and pyttsx3 library. A driver will be registered to our system with name, vehicle driving license number, and images. We will detect the driver through face and machine voice recognition and open the vehicle license form in the Microsoft Word document. We will save driver info in Microsoft Excel with the exact date and time. We proposed a face detection algorithm, Local Binary Pattern Histogram (LBPH), for face feature facial extraction. A machine learning algorithm Haar Cascade Classifier has been used for face detection. We create a Driver facial expression(DFE) dataset, which contains 1500 images for evaluating the proposed architecture. | |