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| **Title:** | Image Based Automatic Traffic Surveillance System Through Number-Plate identification And Accident Detection | | |
| **Author(s) Name:** | S. M. Sunny; Towhidur Rahman; S. M. Zohurul Islam; Asif Mujtaba; Kazi Firoz Ahmed; Shuvra Saha | | |
| **Contact Email(s):** | k.firoz@aiub.edu | | |
| **Published Journal Name:** | ICREST 2021 | | |
| **Type of Publication:** | Conference | | |
| **Volume:** |  | Issue |  |
| **Publisher:** | IEEE | | |
| **Publication Date:** | **January 2021** | | |
| **ISSN:** |  | | |
| **DOI:** |  | | |
| **URL:** | https://ieeexplore.ieee.org/document/9331102 | | |
| **Other Related Info.:** |  | | |
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| **Abstract:** |  |
| The unpredictability and blockage of current transportation frameworks frequently produce traffic circumstances that endanger the security of the individuals in question. A simple invention can make easy to control the traffic system. This paper presents a programmed traffic observation framework to gauge significant traffic boundaries from video arrangements utilizing just captures from cameras. A traffic control kit is developed to detect over speeding cars on highways, number plates in Bengali, and initiating emergency call to 999 on detecting accidents. A GPS enabled traffic surveillance camera can detect the location of accident and send message to the traffic control room with location information of accident. A Python program is used to detect over speed which provides accurate speed of a vehicle very fast. OCR Tesseract is used to detect number plate which has very high performance in detecting noisy texts. To identify a case of accident, a simple Python code with Dens-net Architecture is used. A GSM module of the experimental kit initiate the call and message after analyzing the data through a code of C language. Machine Learning (ML) is used to train the program in identifying number plates. It is done by Anaconda. | |