VISVESVARAYA TECHNOLOGICAL UNIVERSITY

JNANA SANGAMA CAMPUS, BELGAVI-590018

PROJECT REPORT

On

An Efficient Approach for Traffic Monitoring System Using Image Processing

Submitted by

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In partial fulfillment of the requirements for the degree of

BACHELOR OF ENGINEERING

In

INFORMATION SCIENCE AND ENGINEERING

Under the Guidance of

Mr. SHARAN L PAIS

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ALVAS INSTITUTE OF ENGINEERING AND TECHNOLOGY

Moodbidri-574225, Karnataka

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ALVAS INSTITUTE OF ENGINEERING AND TECHNOLOGY

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CERTIFICATE

Certified that the project work entitled "An Efficient Approach for Traffic Monitoring System Using Image Processing" is a bonafidework carried out by

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in partial fulfilment for the award of BACHELOR OF ENGINEERING in **INFORMATION SCIENCE AND ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM** during the year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

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ABSTRACT

Traffic congestion has become a major problem in the world wide. So we need efficient system which monitors the traffic and updates the time setting in traffic signal. The cameras installed in the road junction will be used to capture the real time traffic and these images will be processed to count the number of vehicles in each lane. MATLAB Platform is used where it develops the various object detection algorithms for the combination of many image processing algorithms. The real time object detection and tracking will be generated by control signals where Arduino programming will provide an interfacing hardware prototype. The centroid value will be calculated in each lane. Based on the centroid values obtained from the system, the signals will be sent for the traffic pole as the output.