**“Traffic Assessment using Digital Image Processing”**

**Project Proposal**

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**CSE408 – Digital Image Processing**

Submitted by:

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“On my honor, as student of University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work.”

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Submitted to:

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# Introduction

The detection and counting of intelligent vehicles are taking on an increasingly significant role in the sphere of highway management. However, due to the various sizes of cars, their recognition remains an issue and has a direct impact on the accuracy of vehicle counts. This project presents a vision-based vehicle identification and counting system to overcome this issue.

This project’s main purpose is to assess the traffic by:

* Tracking vehicles through video
* Counting tracked vehicles
* Determining if the road is congested or empty.

Other added features may include:

* Detecting car type
* Analyzing what type of cars cause traffic

## Language

* We’ll be using MATLAB or Python, depending on the best-case scenario.

## Main Concepts

* Detecting vehicle type using Digital Image processing techniques.
* Extracting vehicle information using Digital Image processing.
* Keeping track of identified vehicles.
* Providing analysis of tracked vehicles and traffic.