

Graduation Design Project Proposal Form

Project # C6

Project Title: Traffic Violation Detection using Artificial Intelligence

Professor(s) Name(s): 1. Dr. Saeed Aldosari
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Number of Students: Two

Students Qualifications

Principles of Artificial Intelligence in addition to basic programming skills.

Statement of Problem

Traffic safety can be greatly improved by proper enforcement of traffic laws. This is a very challenging task due to the amount of work needed to monitor thousands or millions of cars continuously. The aim of this project is to explore the use of artificial intelligence techniques to automate this process

Brief Description of the Project

Traffic violations can be monitored using various sensors. The aim of this project is to design an automated system that can detect traffic violations using data from the available sensors.

Objectives

The main aim is to be able to detect traffic violations with the following design objectives:

- (1) Minimum false detections,
- (2) Lowest complexity

Technical Approach and Expected Deliverables

The project shall begin with a survey of existing work. Data sets shall be acquired to be used in the training and testing process. The design process can then be done by iterating through different design alternatives to find the best one. The expected outcome is a software system that can automatically detect traffic violations.