SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN(AUTONOMOUS) BHIMAVARAM

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

MINI PROJECT

ANPR
Automatic Number Plate Recognition (ANPR) System

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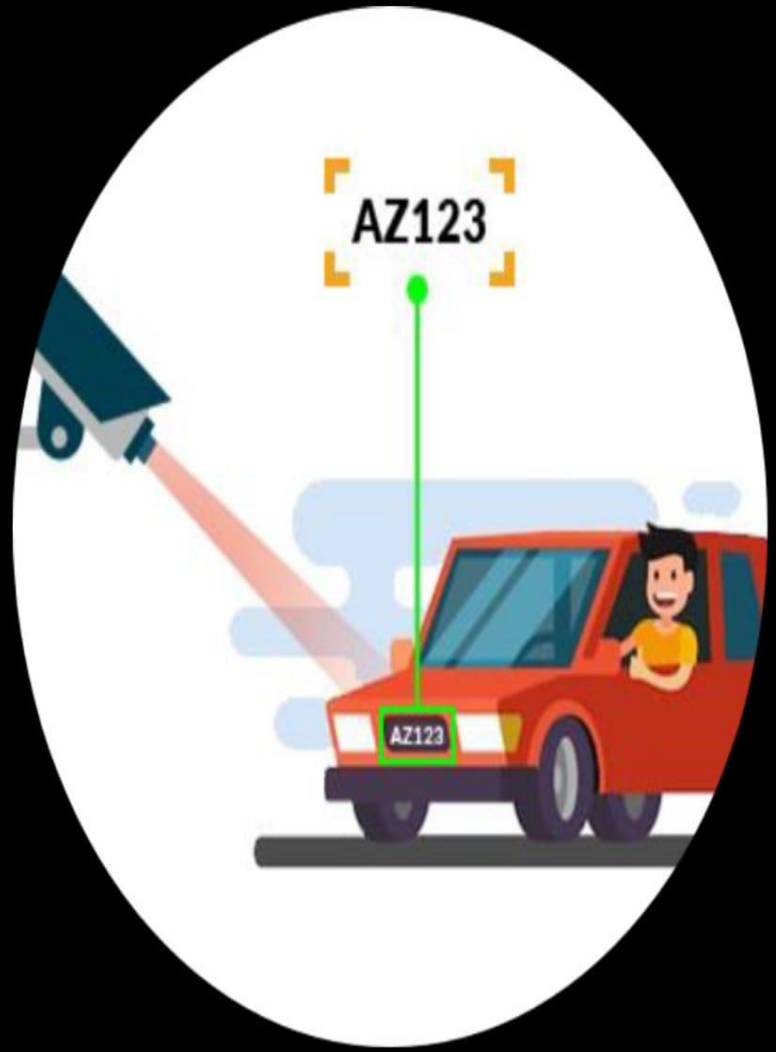

Introduction

The Automatic Number Plate Recognition System (ANPRS) is an advanced project that utilizes computer vision and deep learning techniques to automatically detect and recognize license plates of static or slow-moving vehicles. The main objective is to develop robust algorithms for license plate localization, character segmentation, and accurate character recognition through OCR. ANPRS has diverse applications, including parking management, traffic monitoring, security surveillance, and access control. The system aims to improve efficiency and security in transportation and surveillance scenarios. Through this project, we aim to redefine vehicle management and enhance road safety with cutting-edge technology.

Abstract

The Automatic Number Plate Recognition (ANPR) project focuses on developing a system that can automatically detect and recognize license plates . This technology has significant applications in enhancing security measures, particularly for law enforcement agencies. ANPR aids police personnel in identifying stolen vehicles, tracking suspects, and enforcing traffic regulations. By automating the capture and analysis of license plate information, the system enables quick identification and retrieval of relevant vehicle data. It plays a crucial role in criminal detection and prevention by providing real-time information on vehicles involved in illegal activities. The project aims to optimize the ANPR system for accurate and efficient license plate recognition, empowering law enforcement agencies in their efforts to monitor and apprehend criminals.

Objectives

- License Plate Localization
- Character Segmentation
- Optical Character Recognition (OCR)
- Application Flexibility
- Privacy and Security
- Accuracy and Robustness
- Continuous Improvement

Differences from existing work :

- **Accuracy and Efficiency**
- **Improved Character Segmentation**
- **Continuous Improvement**
- **Optimization for Static and Slow-moving Vehicles:**

  While many existing ANPRS solutions are designed for fast-moving vehicles, our system is optimized for static and slow-moving vehicles. This allows us to capture clearer images, leading to better detection and recognition results.

Timeline

Requirement Gathering & Analysis	Design & architecture	Development	Integration & Testing
1 WEEK	1 WEEK	2 WEEKS	1 WEEK

Thank you