License Plate Recognition System

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Abstract*: By facilitating effective vehicle identification and tracking, the Licence Plate Recognition System (LPRS) plays a crucial role in intelligent transportation systems. The ANPR system described in this research study was created using computer vision methods and optical character recognition (OCR) technology. The proposed LPRS makes use of well-known tools like PyTesseract, OpenCV, and Streamlit to find and extract licence plate numbers from still photos or real-time video streams. For image uploading, real-time video analysis, and retrieving car information from a pre-populated dataset, the system offers an intuitive user interface. The performance of the LPRS is proven by thorough experimental evaluation, displaying its precision and effectiveness in licence plate detection and text extraction. The outcomes demonstrate the LPRS's potential for practical uses in traffic control, parking management, and law enforcement.*

Keywords: License Plate Recognition, Optical Character Recognition, OpenCV, PyTesseract, Streamlit

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