Project Title: Automatic Number Plate Recognition

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Why is ANPR important?

ANPR cameras are an efficient and cost-effective way to monitor parking solutions. In car parks, they negate the need for parking wardens. Thanks to their high-accuracy readings and 24/7 operation, they are more efficient than most individuals and therefore provide a more dependable service

Survey paper:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8123416/

DataSet:

https://www.kaggle.com/datasets/andrewmvd/car-plate-detection

We plan to use Python Tensorflow Object Detection to be able to detect license plates using Kaggle Data. Once those plates have been detected then be able to apply OCR to extract the text from each and every plate using PyTorch and EachOCR.

On top of it all, we export results. We'll set up a saving function to output the regions of interest as well as the detected text. This could be used as part of a broader system or standalone.

Steps:

1. Detects license plates from images and in real time from video.

2. Apply an EasyOCR to license plates to extract the plate number.

3. Save license plates detected for future analysis.