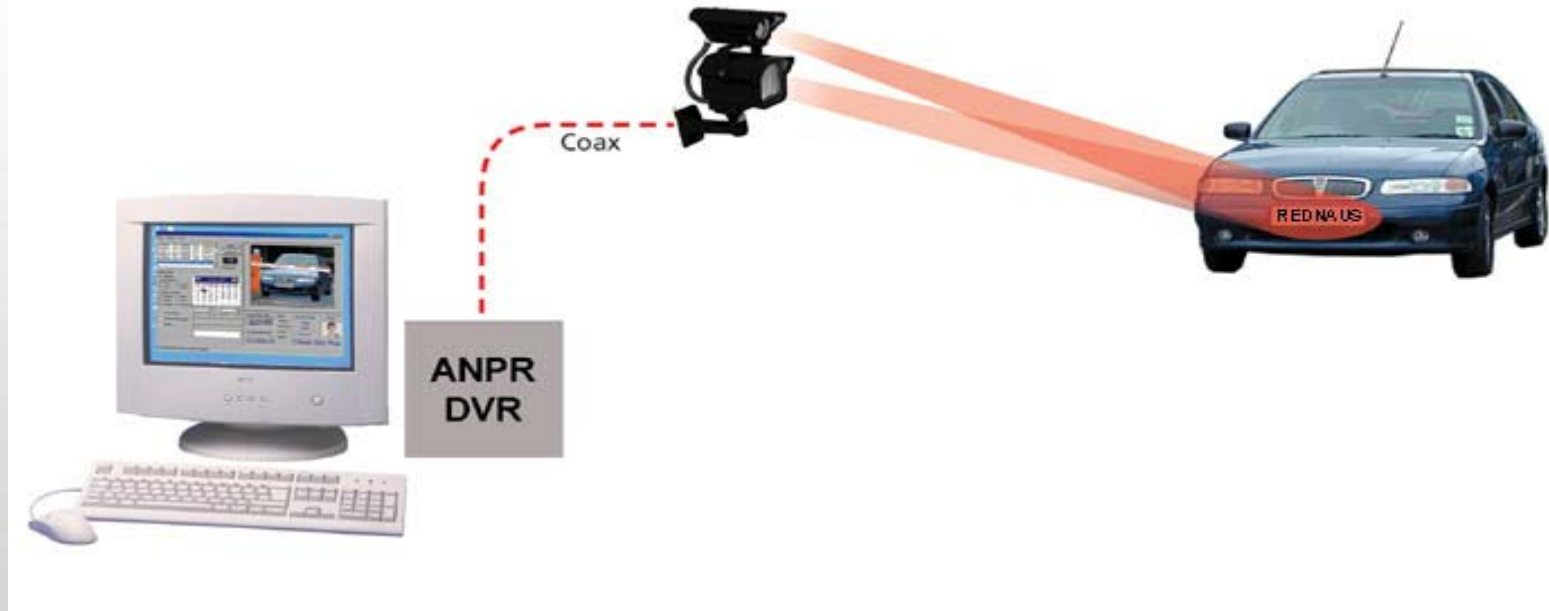


AUTOMATIC NUMBER PLATE RECOGNITION



PROBLEM STATEMENT

To design an automatic number plate recognition system i.e a mass surveillance method which can recognise the license plate on vehicles successfully

METHODOLOGY

The ANPR process is divided two stages:

1. Detection
2. Recognition

DETECTION STEPS :

- Detect the license plate on vehicle
- Crop the detected license plate for further process

RECOGNITION STEPS :

- Segment the detected plate image
- Recognise the segmented characters
- Number plate is successfully recognised

Technology Used :

- ❖ Object detection api is used for detection of license plate
- ❖ Model is trained on custom dataset
- ❖ labeling is used to annotate the data

Technology Used :

- ❖ Tesseract is used for recognition
- ❖ Tesseract takes care of segmentation implicitly
- ❖ Alternate approach is segmentation of image using opencv and then character recognition using svc or r-cnn

Samples



Plate Number : MH20CS9817



Plate Number : KL60N5344

USES

- ❖ **Parking** - In parking lots for allocation of parking slots, parking fee based on duration etc.
- ❖ **Tolling** - In electronic toll collection systems i.e travel fee on tolled roads
- ❖ **Access Control** - For automation of entry of vehicles in secured area like borders, offices etc.
- ❖ **Traffic Control** - In intelligent traffic management system like traffic tickets and so on
- ❖ **Stolen Vehicles** - For detection and investigation purposes