Topic:

social security.

Problem:

Bringing automation in traffic law inforcement by automatically detecting vehicles breaking the speed limit barrier and sending the relevent information to the local authority.

Solution/Innovation:

Building a deep learning model which notifies the vehicle's registration number (number plate) exceeding the speed limit barrier, to the nearest police station.

Value/Proposition:

- reducing the cost and burden from traffic police by providing an automated solution.
- Bringing transparency in traffic law inforcement system by providing relevent proves such as picture and speed of the vehicles breaking rules.
- To reduce rash and negligent driving by quality law enforcement.

Core technology / Architecture:

- Open computer vision (openCV).
- Deep Learning.
- Transfer Learning.
- python web framework django.

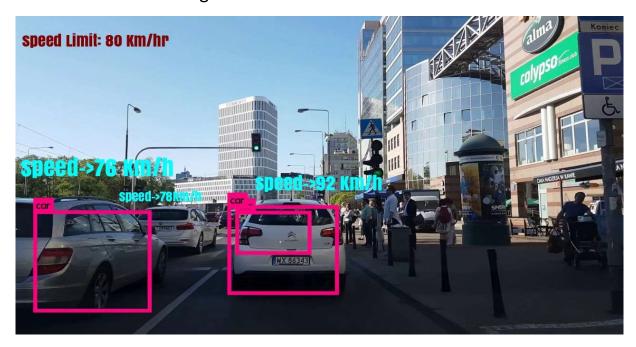
Road map:

- 1. Detecting vehicles breaking the speed limit barrier using openCV and transfer learning.
- 2. Taking a snapshot of the vehicles and detecting number plate using haas Carcade.

- 3. Extracting digits and numbers from number plate using a pre trained model.
- 4. Using a suitable web framework to send the license number through text or mail to the local authority or police station.

DEMO->

1. Detecting vehicles breaking the speed limit barrier using openCV and transfer learning.



2. Taking a snapshot of the vehicles and detecting number plate using having (seed > speed Limit)



3. Extracting digits and numbers from number plate using a pretrained model.



4. Using a suitable web framework to send the license number through Message or mail to the local Nearest police station or Local Authority.



Vehicle Registration number: WX 86343 HAS BEEN TRACED IN VIOLATING THE TRAFFIC NORMS BY CROSSING THE SPEED LIMIT OF 90 KM/H.

-> EXPECTED FINE WILL BE: 30 USD