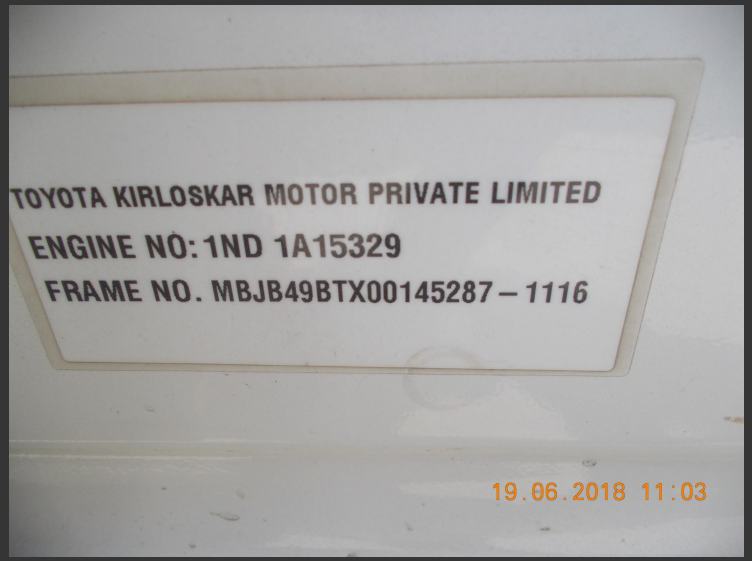
VIN Number Identification

CVision.ai Internship Assignment

Model and API Used

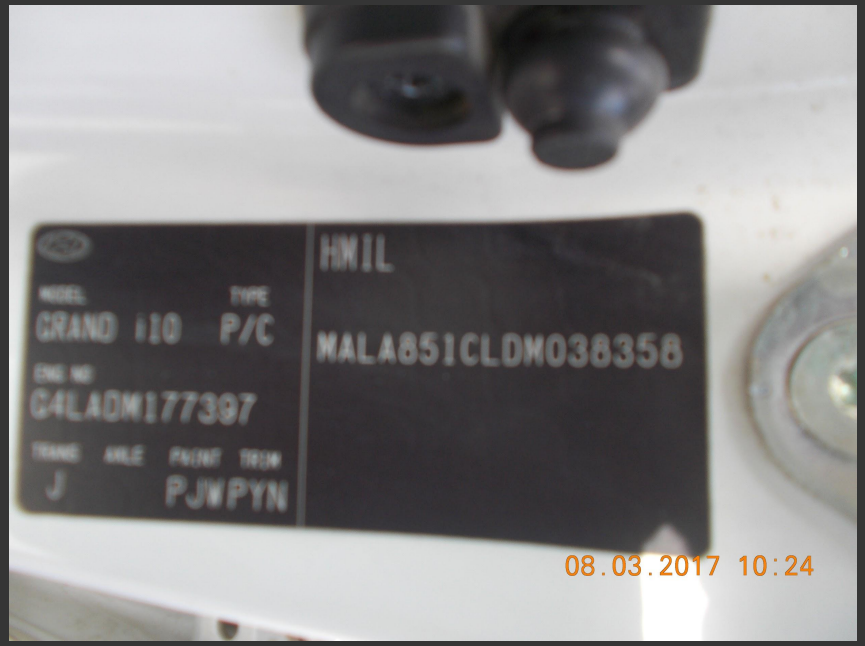
Model is using general Google Cloud Vision Api for its built in OCR Text Detection Model. The data on which we had to test our model is too complex and noisy. VIN Numbers in most of the image is not visible completely or rotated at an awkward angle. The noise on the images makes it more difficult to the state of the art Google Vision OCR to recognize the text. In images filled with text and the model reads different texts I have used brute force to detect the text which matches VIN numbers, since the images don't contain full VIN numbers.

Output on Clear Image



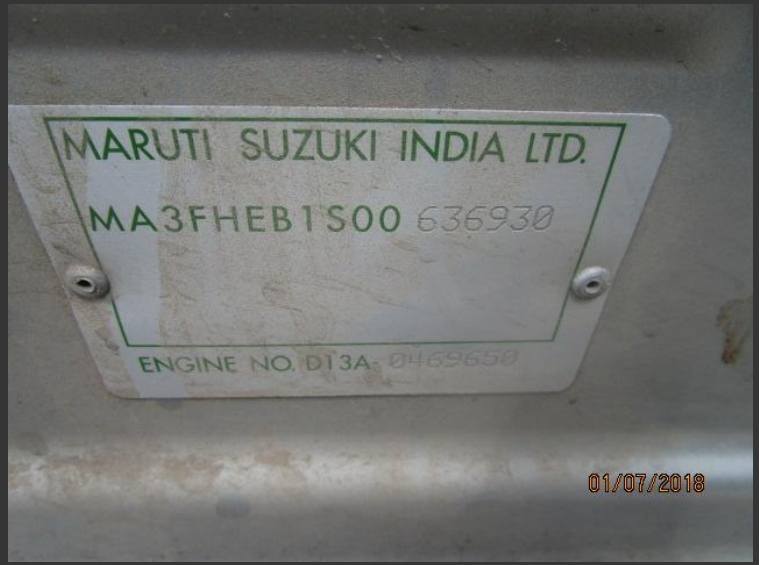

```
arif@RF: ~/Desktop/CV_VIN
arif@RF:~/Desktop/CV_VIN$ python3 Model.py --image './Vin_number_internship/DSCN
4536.JPG'
Possible Matches for VIN Number:
MBJB49BTX00145287-1116
arif@RF:~/Desktop/CV_VIN$
```

Output on Blurry Image




```
arif@RF: ~/Desktop/CV_VIN
arif@RF:~/Desktop/CV_VIN$ python3 Model.py --image './Vin_number_internship/DSCN
9520.JPG'
Possible Matches for VIN Number:
MALAB51CLOM038358
arif@RF:~/Desktop/CV_VIN$
```

Multiple Output on Difficult Image




```
arif@RF: ~/Desktop/CV_VIN
arif@RF:~/Desktop/CV_VIN$ python3 Model.py --image './Vin_number_internship/IMG_
0847.JPG'
Possible Matches for VIN Number:
MA3FHEBTSOO
53693g
D13A:04696
arif@RF:~/Desktop/CV_VIN$
```

Instructions to Run the Model.py

To run the following model you need following modules :
Google Cloud , OpenCV, IO, OS, Argparse

Make the folder containing the Model.py and creds.json file as current working directory using

$cd ‘path’

Run the following command with image path given as argument :

$python3 Model.py --image ‘path to image’

Answer to the Given Questions

1. Would you be available for next 2-3 months?

Ans : Yes I am available for the next 2-3 months starting from now for the internship.

2. Do you have any major commitments over next 2-3 months? Including examinations etc

Ans : Yes, I have my 6th semester examinations in the mid of may but my commitment on internship work will never get affected by the exams.

Personal Details

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