# **Car Identifier**

## **Objective**

Automate the process of recognizing the details of the cars from images, including make and model. Build and Deploy a Deep Learning model as a publically API endpoint on a cloud provider.

### **Tasks Completed**

- · Train a deep learning model to identify car details
- Wrap above model in a python flask app
- · Dockerised the flask app
- · Docker container deployed on a Google Cloud VM instance
- · Created Open API specification for the same

#### **URLs**

- Prediction Link (http://tensortaal.com/cars/v1/get\_car\_details)
- Open API Documentation Link (http://tensortaal.com/swagger/)
- <u>Bitbucket Repository</u> (https://bitbucket.org/joeyzbb/vipul jain/src/master/)

### Code

All python code is PEP8 complaint.

#### **Packaging**

The model is wrapped in a <u>python flask</u> app which serves the prediction as an api endpoint.

Flask app has been dockerised using docker.io

API specification has been created using Open API 3.0

### **Deployment**

Docker container has been deployed on a GCP VM instance.

# Running the code

- Step 1. Navigate to *vipul\_jain/flask*
- Step 2. Build docker image with the command below -: docker build -t vj\_cars .
- Step 3. Run docker container with the command below docker run -d -p 80:4000 vj\_cars
- Step 4. Confirm if container is running with the command below -: docker ps