

ML/DL Assignment

EagleView



Object Detection is one of the fundamental tasks in computer vision with applications ranging across medicine, robotics, and many others. In this task, you are given a dataset that consists of images containing people and cars. The goal of this task is to train a model that can localize and classify each instance of person and car as accurately as possible.

Dataset Details:

Number of images: 2239
Size: 750 MB (approx.)
Categories: 2 (person and car)
Annotation format: [COCO](#)

Data directory structure:

```
data
|_ annotations
|   |_ bbox-annotations.json
|_ images
|   |_ image_000000001.jpg
|   |_ image_000000002.jpg
|   |_ ...
|   ...
```

License: These images are taken from [OpenImages](#). All annotations are licensed under [CC BY 4.0](#) and the images have a [CC BY 2.0](#) license*

Link to download the dataset: <https://evp-ml-data.s3.us-east-2.amazonaws.com/ml-interview/openimages-personcar/trainval.tar.gz>

Results Format:

We want you to develop and train a model on this dataset to detect person and cars in an image. You are free to use any open-source software and repository.

Deliverable:

1. A brief write-up about your solution explaining your assumption, approach, metrics, and other artifacts.
2. A link to your solution code base hosted in a GitHub repository.

*we make no representations or warranties regarding the license status of each image and you should verify the license for each image yourself.

Note:

1. The labels are already present in this dataset, thus there is no need to annotate the images from scratch.
2. Kindly try to keep your code readable and object-oriented, if possible, with proper method names.
3. Provide documentation in the GitHub README and don't upload heavy files/folders for instance – datasets and model weights.

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