

Approach:

We treat this problem as simple regression problem on 4 dependent variables. We input images in CNN network after applying some data preprocessing (normalize pixel values, reduce channel of image to 1, resize image to (160, 120)) and output as 4 continuous values b/w 0 to 1.

Then, we multiply these values with 640 and 480 according to variable range.

Requirements

- Python 3.3+ or Python 2.7
- macOS or Linux or Windows

Dependencies :

1. Python
2. Keras
3. Pandas
4. Hdf5
5. H5py
6. Nltk.corpus
7. opencv
8. scikit-image
9. scikit-learn
10. pillow

Points:

1. Keep the code in "./code" folder.
2. Keep the "images" folder (keep the name same) in "./data" folder along with "training.csv" and "test.csv" file.
4. **All libraries used are updated.**

Run as:

Training : `python 90_1.py_ --mode=train`

Testing : `python 90_1.py --mode=test`