

Foundation of AI with Python – Capstone Project on Computer Vision

Objective

Developing a Custom Model using Facebook - Detectron 2 which we will be using on Google Co-labs platform

Technical Brief

Please go through the below article on how to train Detector 2 with custom datasets

- How to train Detectron2 with Custom COCO Datasets
 - <https://medium.com/@chengweizhang2012/how-to-train-detectron2-with-custom-coco-datasets-4d5170c9f389>

To develop a custom model, you will be utilizing the Google Co-lab facility at the below link.

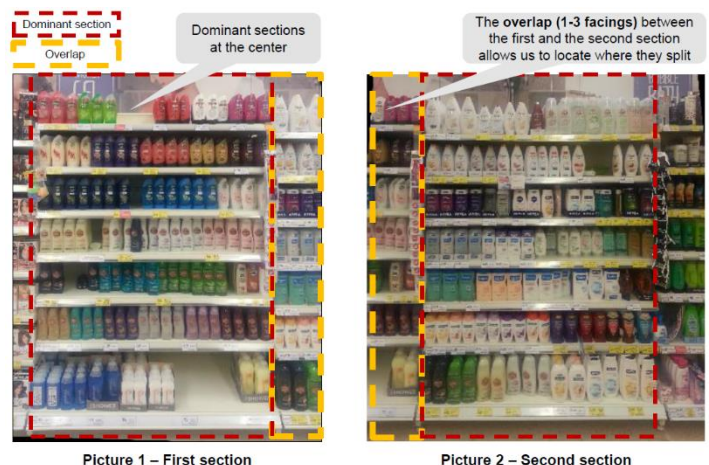
- You need to create an account for yourself and start training your model
 - https://colab.research.google.com/drive/16jcaJoc6bCFAQ96jDe2HwtXj7BMD_-m5

Scope

1. Images of multiple products, need to be collected for which the students will need to go and take pictures of products and load them into a shareable directory
2. Guidelines to ensure the images conform to required specifications and are usable across the board for everyone
3. How to take photos? Practice guidance
 - a. All relevant products visible
 - b. Pictures follow the shelf left to right (Take first photo from the left, last photo on the right model side.
 - c. Pictures consistent through the same category/store checks. i-e: If you select Cold drinks, then take photos of cold drinks only. Don't mix cold drinks with diapers.
 - d. Categories are listed below as a,b,c,d,e,f and g
 - e. Photos should be 20% overlapping, as explained in the example on the right.
 - f. Don't take photos from an angle. You should be in front of shelf, where you are taking photo. Move to right side for next photo.
4. You will be assigned a category from below list and will need to collect at least 50 to 100 photos.

Available categories

- a. Beverages
 - i. Coca Cola
 - Diet Coca Cola / Coke Zero
 - Sprite
 - Fanta
 - ii. Pepsi



- Diet Pepsi
- 7UP
- Mountain Dew
- Aquafina
- Mirinda

iii. Juices

b. Eatables

- Lays
- Cheetos

c. Laundry

- i. Ariel
- ii. Comfort - fabric softeners
- iii. Rin - detergent
- iv. Surf Excel - detergent and gentle wash.

b. BabyCare

- i. Pampers

c. Beauty

- i. Safeguard
- ii. Pantene
- iii. Head & Shoulders

d. Health

- i. Blue Band
- ii. Rafhan (corn oil)
- iii. Knorr
- iv. Glaxose-D

e. Tea

- i. Lipton
- ii. Brooke Bond

f. Ice Cream

- iii. Wall's
- iv. Cornetto (ice cream)
- v. Magnum (ice cream)

g. Tissues

- i. Rose Petal tissue boxes