

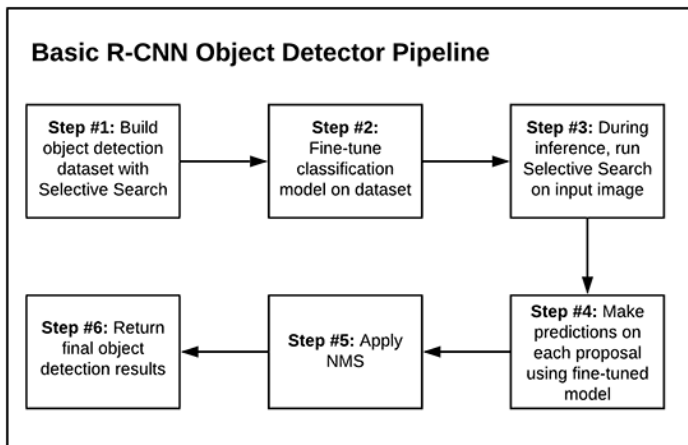
Project 2 – Object Detection & Instance Segmentation

Dataset: This dataset contains about 152 images and 152 annotations of Chihuahua dogs. Dataset can be found [here](#).

Task: Goal is to perform Object Detection using R-CNN and YOLOv3 and Instance Segmentation using Mask R-CNN

Implementation:

1. Implement a Basic R-CNN object detection pipeline



- Provide the results for any 3 images(for testing purposes) from the dataset. You can use the markdown cells to include results for the 3 images.
- 2. **Implement object detection using YOLOv3 pretrained on COCO dataset.**
 - The pretrained weights, cfg and coco.names file has been provided under [yolo-coco](#) folder (click the link).
 - Provide the results for any 3 images(for testing purposes) from the dataset. You can use the markdown cells to include results for the 3 images.
- 3. **Implement Instance Segmentation using Mask R-CNN with OpenCV.** The necessary files are provided under [mask_rcnn](#) folder (click the link). For this task please use please use the following images from the dataset provided and show the results:
 - a. n02085620_730.jpg
 - b. n02085620_1862.jpg
 - c. n02085620_4998.jpg
 - d. n02085620_3651.jpg
 - e. n02085620_4572.jpg
- You can use the markdown cells to include results for the 5 images.

Discussion: Please discuss and analyze the results of the implementation.