

Object Detection and segmentation

Current Status

- After proposal and feedback came up with instance segmentation instead of object detection.
- Made a subset of data required from COCO dataset with required classes of objects(Person, dogs and cats).
- Problems faced: Annotations for the images in json file contains instances for all the objects in the dataset so need to make some preprocessing.
- Pre Trained models chosen: MaskRCNN with backbone Inception, ResNet.
- Notebook Link: [Notebook](#)
- Modifying the mask r cnn architecture to work on 3 classes.

What went well?

- Mask RCNN worked well when only a single class object is passed during training.
- Annotation errors when working on all the three objects. (Working on it).

Steps to Achieve the promised deadline

New Milestones

Fixing the mask RCNN.	4/20
Training mask RCNN with backbone Resnet, Inception and hyperparameter tuning	4/21-4/22
OpenCV to deploy the trained model	4/23

Flask and Documentation.	4/24-4/25