

Notes

This document give some markup and detailed information about my current research outcome.

1. About ImageNet

After discussing with peers about RCNN, I rethink the dataset for pre-training and fine-tuning. And this give me more clues about my experiment.

1) Microsoft CoCo dataset for pre-training.

2) ImageNet dataset for fine-tuning.

The problem before is that we don't have bounding-box for many of ImageNet dataset, as ImageNet official websites show:

How to download the bounding boxes?

- We have not yet released the bounding boxes for all synsets. To check the list of synsets with bounding boxes, please use the API:
- http://www.image-net.org/api/text/imagenet.bbox.obtain_synset_list
- When you browse each individual synset (e.g. Kit fox), you can download the bounding boxes if there is an icon "Download Bounding Boxes" in the Download panel.
- You can download all the bounding boxes available packaged in one file [here](#)
- You can also use the following API to download the bounding boxes of **a particular synset**:
[http://www.image-net.org/api/download/imagenet.bbox.synset?wnid=\[wnid\]](http://www.image-net.org/api/download/imagenet.bbox.synset?wnid=[wnid])

To learn more about download using HTTP protocol, please refer to *API documentation*.

when I search for example "pizza" I can download all the images but cannot download its bounding box, it shows invalid url.

I still download all the bounding-box in one file, and surprisingly that it contains all the needed synsets. **Maybe it's due to the websites' problem.**

For all detailed annotations, please refer to Annotation.tar.gz files under this directory.