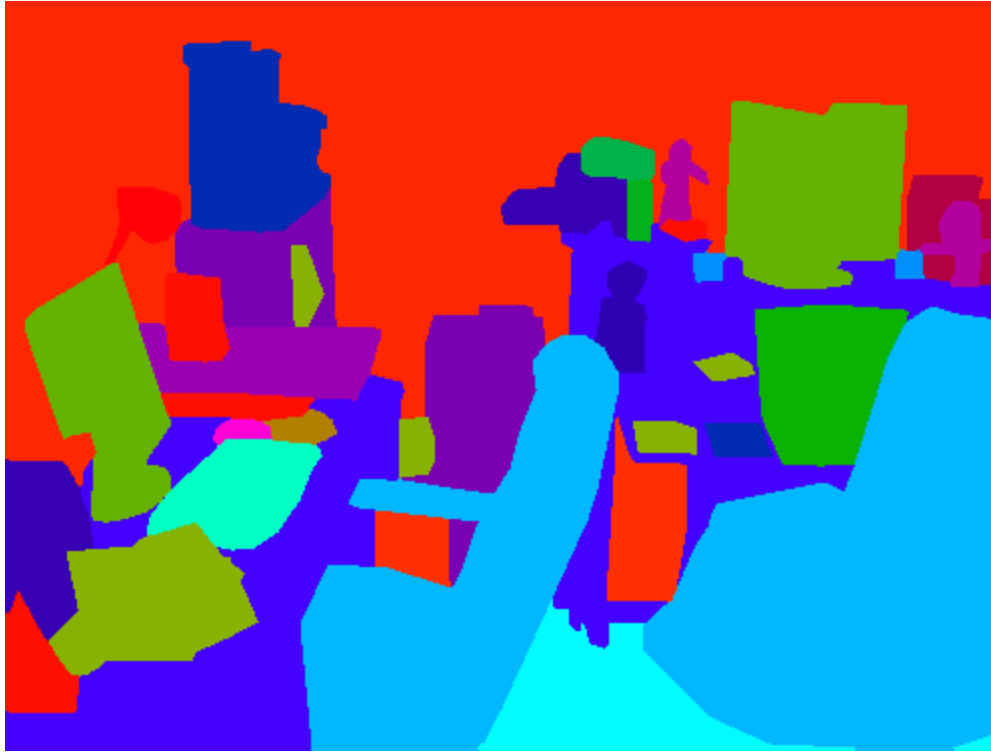


# PASCAL-Context Dataset

This dataset is a set of additional annotations for PASCAL VOC 2010. It goes beyond the original PASCAL semantic segmentation task by providing annotations for the whole scene. The statistics section has a full list of 400+ labels.

Below are some example segmentations from the dataset.





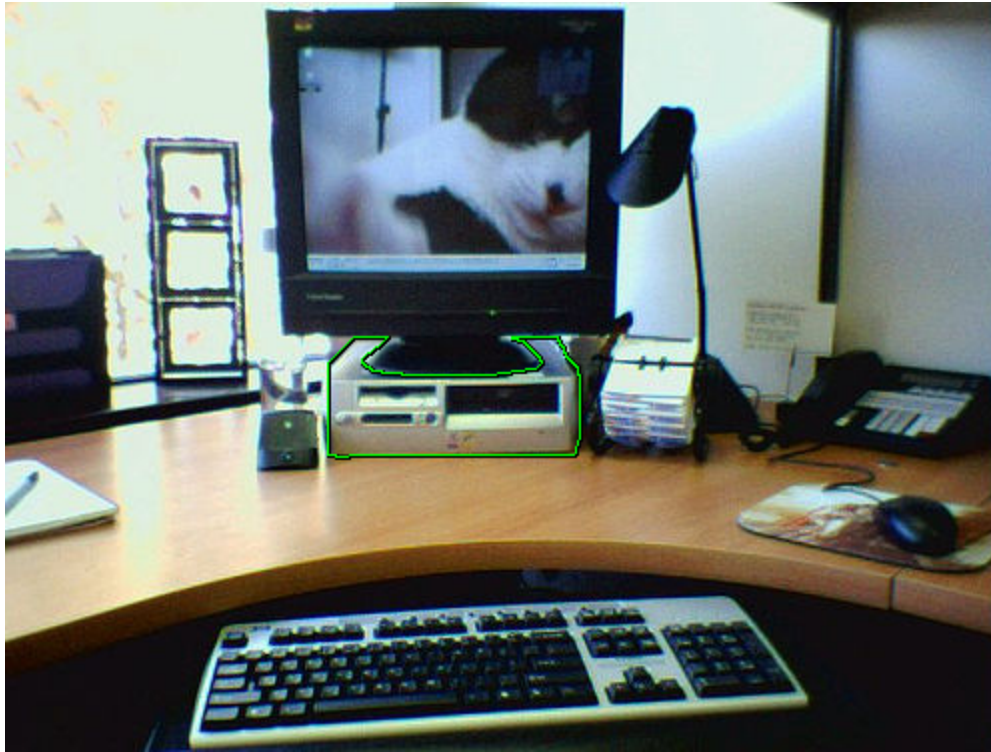








Below are some example class masks.



computer



sofa



tree

## Download

### Training and Validation Set

The following download contains *only* the annotations for the training/validation set and a text file ( `labels.txt` ) containing the integer-to-name mapping.

[trainval.tar.gz \(30.7 MB\) \(trainval.tar.gz\)](#)

- MD5: df034edb2c12aa7d33b42b20bb1796e3
- SHA1: e1375777199dcc02097e68aea755415ca173aa2d

Original images for the dataset can be downloaded from the PASCAL VOC 2010 website (<https://web.archive.org/web/20170613074321/http://pascallin.ecs.soton.ac.uk/challenges/VOC/voc2010/>).

## Testing Set

Please download the images from the PASCAL VOC website.

## Project Specific Downloads

The segmentation results for the 33 categories and the label-to-name mapping can be downloaded here (trained on the train subset and tested on the val subset). This is the result of a 33-way classifier. These segmentations were used to train contextDPM in the paper.

[33\\_context\\_labels.tar.gz \(27.1 MB\) \(33\\_context\\_labels.tar.gz\)](#)

[33\\_labels.txt \(345 B\) \(33\\_labels.txt\)](#)

The segmentation results for the 59 categories and the label-to-name mapping can be downloaded here (trained on the train subset and tested on the val subset). This is the result of a 59-way classifier. The accuracies in Tables 1 and 2 in the CVPR paper are computed according to these predictions.

[59\\_context\\_labels.tar.gz \(14.1 MB\) \(59\\_context\\_labels.tar.gz\)](#)

[59\\_labels.txt \(613 B\) \(59\\_labels.txt\)](#)

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# Statistics

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Since the dataset is an annotation of PASCAL VOC 2010, it has the same statistics as those of the original dataset. Training and validation contains 10,103 images while testing contains 9,637 images.

Click on the panel below to expand the full class list. The following image count and average area are calculated only over the training and validation set. When the testing set is released these numbers will be updated. Image counts below may be zero because a class was present in the testing set but not the training and validation set.

➤ Class list

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# Usage Considerations

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The classes are not drawn from a fixed pool. Instead labelers were free to either select or type in what they believe to be the appropriate class and to determine what the appropriate object granularity is. We decided to merge/split some of the categories so the current number of categories is different from what we mentioned in the CVPR 2014 paper.

When using this dataset it is important that you examine classes to ensure they match your intended use. For example, `sand` is often labeled independently despite also being considered `ground`. Those interested in `ground` may want to cluster `sand` and `ground` together along with other classes.

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# Citation



PDF (2.4 MB) (mottaghi\_et\_al\_cvpr14.pdf)



Bibtex (mottaghi\_et\_al\_cvpr14.bib)

## "The Role of Context for Object Detection and Semantic Segmentation in the Wild"

Roozbeh Mottaghi  
(<https://web.archive.org/web/20170613074321/https://cs.stanford.edu/~roozbeh/pascal-context/>)  
Xianjie Chen  
(<https://web.archive.org/web/20170613074321/https://www.xianjiechen.com/>)  
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(<https://web.archive.org/web/20170613074321/https://www.urtasun.com/>)  
Alan Yuille  
(<https://web.archive.org/web/20170613074321/https://www.alanyuille.com/>)  
IEEE Conference on  
Computer Vision and Pattern  
Recognition (CVPR), 2014

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# Acknowledgements

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