

# Background Dataset

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All data regarding our ECCV 14 paper can be downloaded from our project page: [http://www.inf.tu-dresden.de/index.php?node\\_id=3629&ln=en](http://www.inf.tu-dresden.de/index.php?node_id=3629&ln=en). If you run into problems contact: eric <dot> brachmann <at> tu-dresden.de.

## 1 Overview

This dataset contains RGB-D images of different, cluttered office backgrounds. They were used in our ECCV 14 paper[1] to represent the background class when training a random forest. If you use this data, please cite the aforementioned paper.

The data comes in two different sets:

**BG\_Rooms** RGB-D images of cluttered office backgrounds without objects of our 20 objects dataset appearing in the scenes.

**BG\_Rooms\_Obj** RGB-D images of cluttered office backgrounds. Some objects of the 20 objects dataset may appear in the scenes.

## 2 Structure

The dataset is structured as follows: At the top level, there are two folders that represent the two sets as mentioned above. Each set folder contains 2 sub-folders with the sequence data. Each sequence data item is named after the following scheme:

```
<data prefix>_<image number>_<data extension>
```

The sequence data is split into `rgb_noseg` and `depth_noseg`.

### 2.1 rgb\_noseg

These folders contain rgb images. Each image is a 3 channel 8 bit (unsigned char) PNG file.

## 2.2 depth\_noseg

These folders contain depth images. Each image is a 1 channel 16 bit (unsigned short) PNG file. The depth values are stored in millimeters. A depth value of 0 means missing depth.

## References

- [1] Brachmann, E., Krull, A., Michel, F., Gumhold, S., Shotton, J., Rother, C.: Learning 6d object pose estimation using 3d object coordinates. In Fleet, D., Pajdla, T., Schiele, B., Tuytelaars, T., eds.: *Computer Vision – ECCV 2014*. Volume 8690 of *Lecture Notes in Computer Science*. Springer International Publishing (2014) 536–551