Background Dataset

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All data regarding our ECCV 14 paper can be downloaded from our project page: `https://hci.iwr.uni-heidelberg.de/vislearn/research/scene-understanding/pose-estimation/#ECCV14`. 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