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# OPEN IMAGES CHALLENGE 2019

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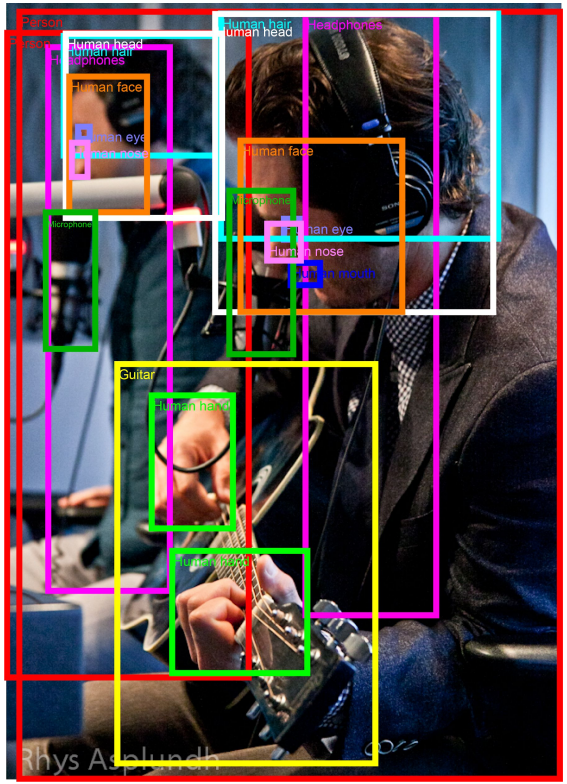
# Closing remarks

# Open Images V5 dataset: object bounding-boxes



# Open Images V5 dataset: visual relationships

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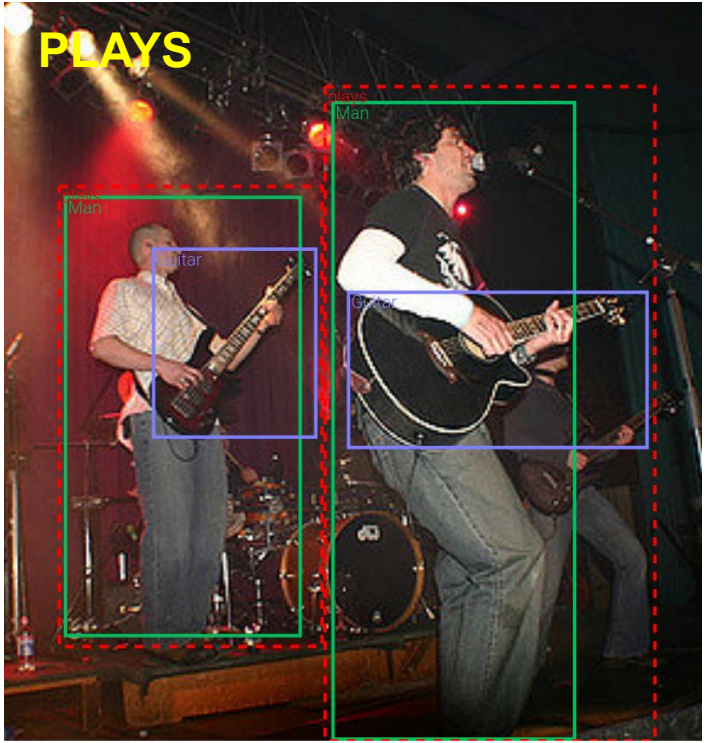


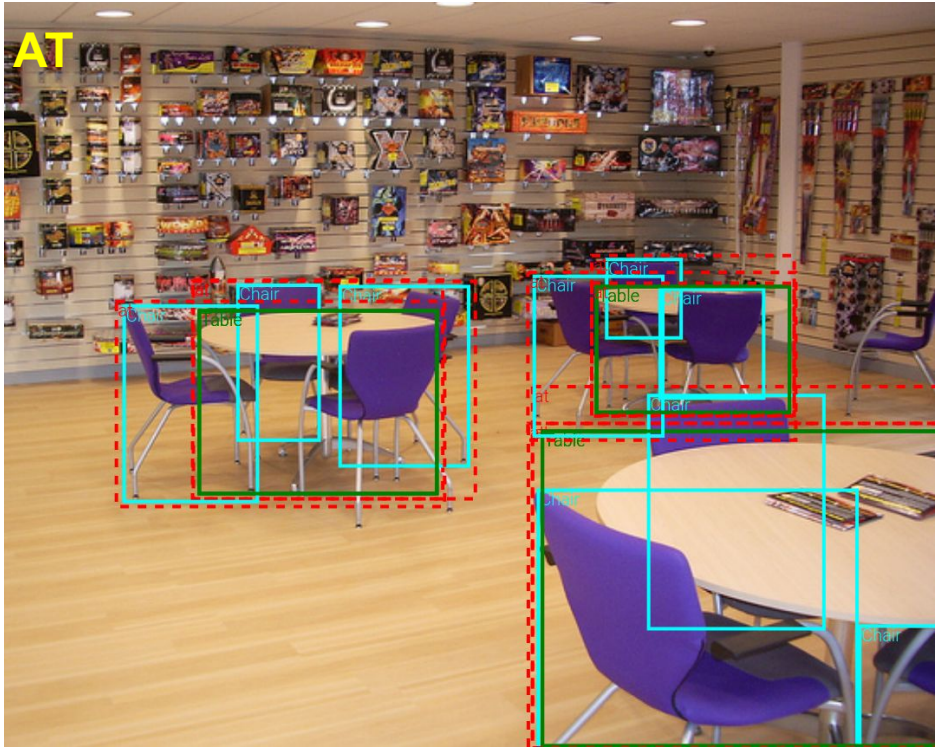

# Open Images V5 dataset: instance segmentation masks (NEW)

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# Check out our Open Images papers for detailed statistics and analysis

**Fig. 15 Examples of large number of annotated boxes**: Images with 348, 386, and 743, respectively. `GroupOf` could have been used in many of these cases, but nevertheless they still have interest in practice.

**Fig. 16 Examples of box attributes**: `GroupOf`, `Occluded`, `Depiction`, `Truncated`, and `Inside`.

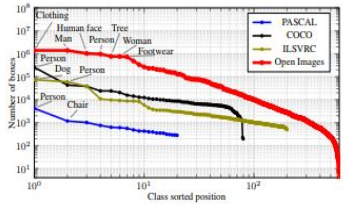


**Fig. 17 Number of boxes per class**. The horizontal axis is the rank of each class when sorted by the number of boxes, represented in logarithmic scale for better readability. We also report the name of the most common classes.

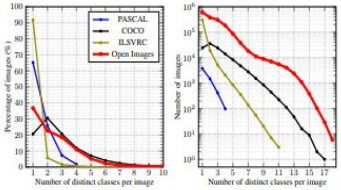


**Fig. 18 Number of distinct classes per image**. Normalized (left) and unnormalized (right) histogram of the number of distinct classes per image.

[The Open Images Dataset V4: Unified image classification, object detection, and visual relationship detection at scale]

A. Kuznetsova, H. Rom, N. Alldrin, J. Uijlings, I. Krasin, J. Pont-Tuset, S. Kamali, S. Popov, M. Malloci, T. Duerig, V. Ferrari

arXiv 2018

[Large-scale interactive object segmentation with human annotators.]

R. Benenson, S. Popov, and V. Ferrari.

CVPR 2019

# Potential future additions

- Much larger visual relationship annotation set: more triplets and also individual human actions
- More segmentations
- Free-form annotations to support language and vision tasks

**To receive updates about Open Images, please subscribe to our Newsletter here:**

https://storage.googleapis.com/openimages/web/news.html

# Congratulations to the winners again!

## Object detection

1st MMFruit

2d imagesearch

3d Prisms

4th PFDet

5th Omni-detection

## Instance Segmentation

1st MMFruitSeg

2d [ods.ai] n01z3

3d PFDet

4th tito (individual)

5th ZFTurbo & Weimin

## Visual Relationship Detection

1st Layer6 AI

2d tito (individual)

3d Very Random Team

4th [ods.ai] n01z3

5th Ode to the Goose

# Challenge organizers

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Rodrigo Benenson

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# Thanks to ...

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**Figure Eight**
For hosting the data

**Kaggle**
For hosting the competition

Julia
Elliott

# Thanks to our sponsors