CloudLabeling.org

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GETTING STARTED

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Cloud Labeling: Object Detection Platform for Dataset Annotation and Detection Models Training

GETTING STARTED 1

2 GETTING STARTED

CHAPTER	
ONE	

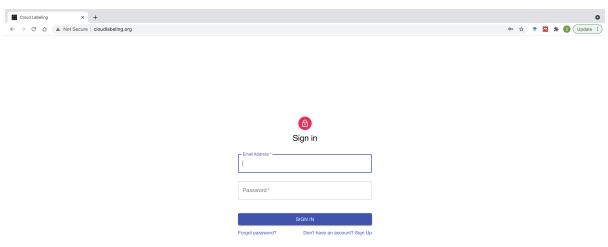
CREATE AN ACCOUNT

To create an account, please send us an email at silvio [dot] giancola [at] kaust [dot] edu [dot] sa .

TWO

SIGN IN CLOUDLABELING

To log in, visit https://cloudlabeling.org and enter your credentials.

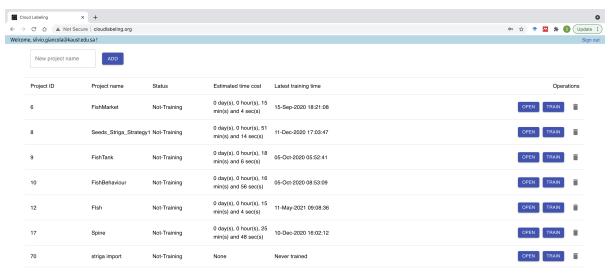


If you do not have any credentials, create one by sending us an email at silvio [dot] giancola [at] kaust [dot] edu [dot] sa .

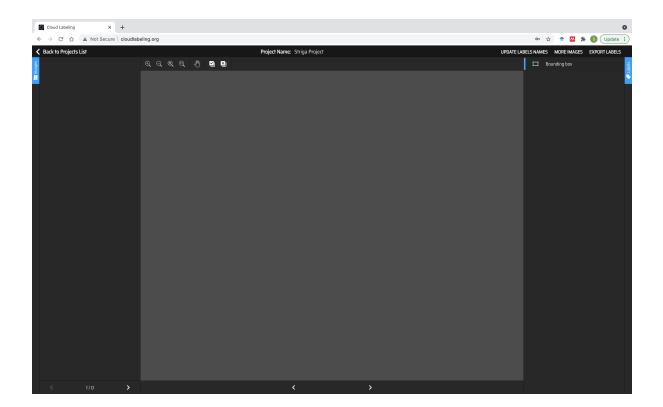
THREE

CREATE A PROJECT

To create a project, type a name is the box "New Project Name" and click on "Add".



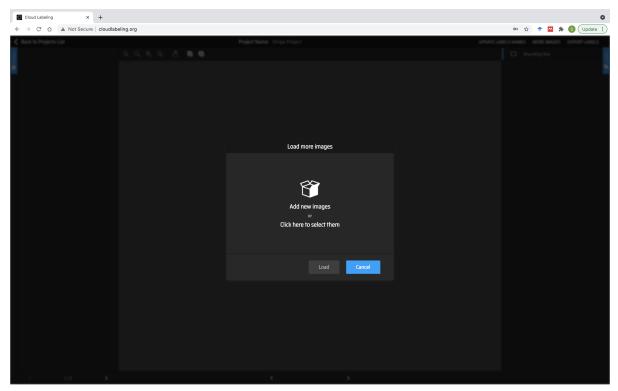
Once your project is created, you can "Open" it.



FOUR

UPLOAD DATASET

Upload your images by clicking on "More Images".

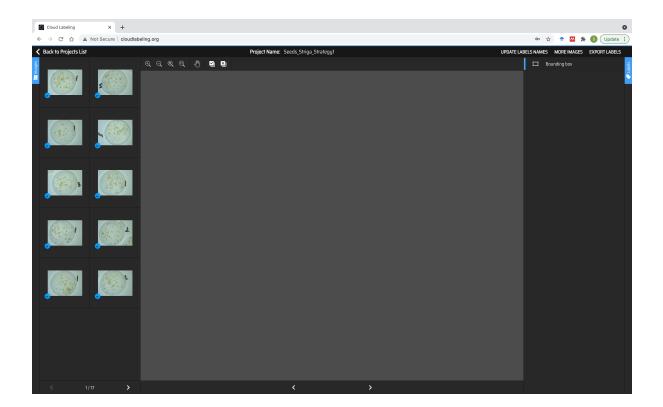


Either Drag and Drop images, or find them on your computer.

If you have annotations for your images, you can import them when uploading the images.

We currently support the standard Pascal VOC format (XML).

Your uploaded images will appear on the left panel.

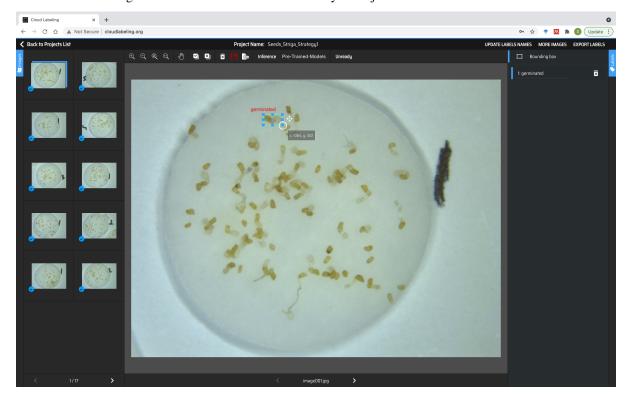


ANNOTATE IMAGES

5.1 1. Manual Annotation

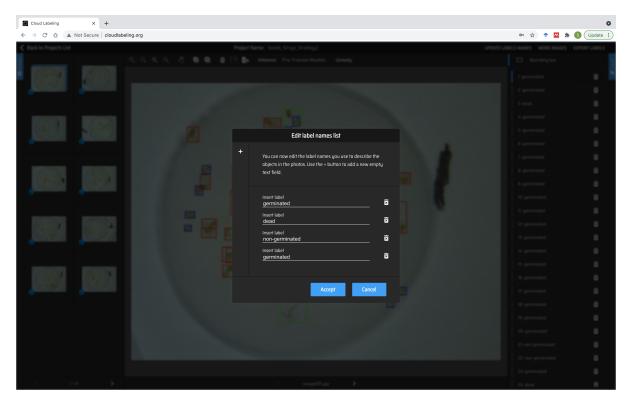
Selct the image you want to annotate on the left panel.

Interact with the image to draw boxes that identifies at best your object.

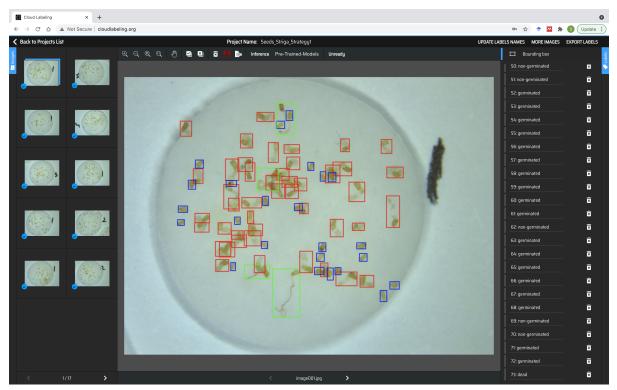


Make sure to give your object a class name on the right panel.

You can define the list of object class to detect by clicking on "Update Labels Names".



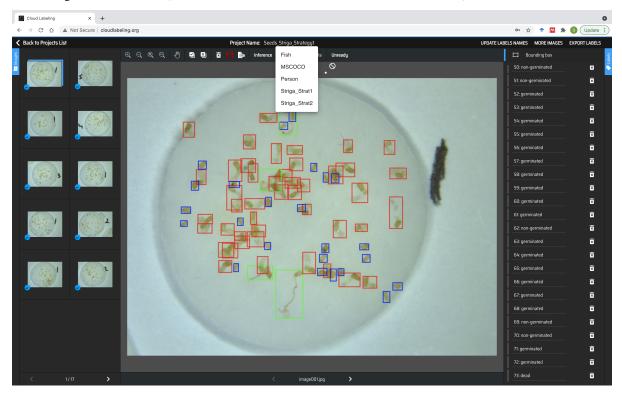
Once your annotations are complete, make sure to save them by clicking on the red "Save" button.



5.2 2. Automatic annotations

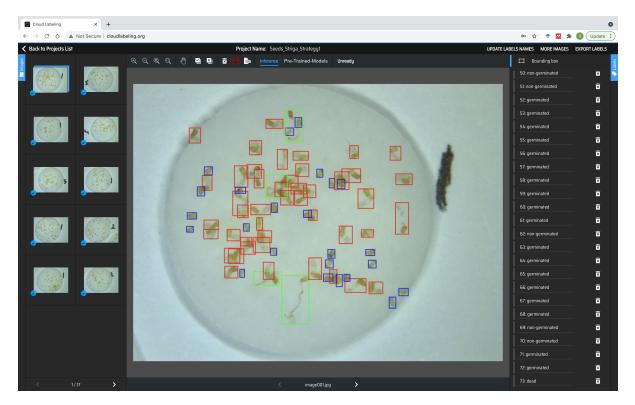
You can automatically annotate you images by inference generic pre-trained models. We provide models pre-trained on:

- MSCOCO (80 generic classes),
- Fish detection (generic),
- · People detection and
- Striga Seeds detection (Germinated/Non-Germinated Seeds and Seeds/Radical).



Note that once you have pre-trained your own model, you can also infer your model on those images with the button "Inference".

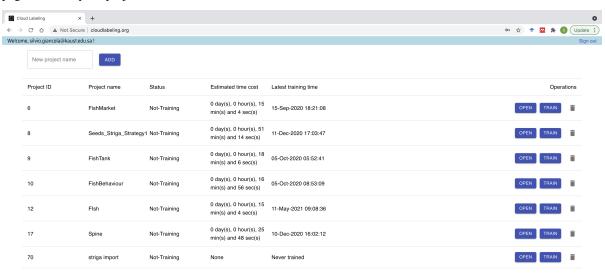
CloudLabeling.org



Note that those automatic annotations will erase your previous manual annotations.

HOW TO TRAIN A MODEL

Once you have annotated at least a couple of images, you can close your project, and start a training on the main landing pages with all your projects.



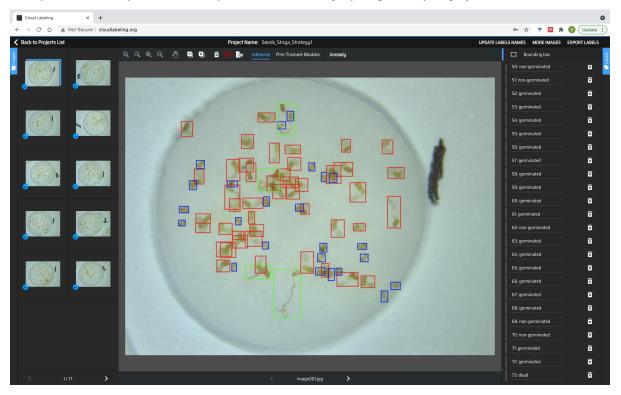
The interface will inform you whether it is currently training, the estimated time for the training of the model, and when was the last training performed.

HOW TO INFER WITH A MODEL

7.1 1. Inference on CloudLabeling.org

Once you have trained a model, you can infer a

Once you have trained your own model, you can infer new images you upload in your project with the button "Inference".



Note that those automatic annotations will erase your previous manual annotations.

7.2 2. Remote Inference

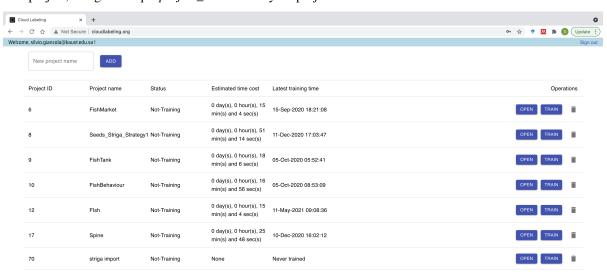
You can remote infer image by sending your image in our server.

We provide an API call for remote inference with:

Example for inference:

```
curl -H "Content-Type: image/jpeg" \
-H "project_id: MSCOCO" \
-X POST \
--data-binary @/path/to/your/image.jpg \
http://cloudlabeling.org:4000/api/predict
```

You can set the *project_id* to any pretrained model available on CloudLabeling, or the model you have trained in your own project, using its unique *project_id* shown in your project list.



We also provide a pip package for python application, available at https://pypi.org/project/cloudlabeling. Further information for integration are available on https://github.com/SilvioGiancola/cloudlabeling-api.

EIGHT

API CALLS

8.1 1. API call for training

8.2 2. API call for inference

Example for inference:

```
curl -H "Content-Type: image/jpeg" \
-H "project_id: MSCOCO" \
-X POST \
--data-binary @/path/to/your/image.jpg \
http://cloudlabeling.org:4000/api/predict
```

NINE

FREQUENTLY ASKED QUESTIONS

9.1 How to create an account?

CloudLabeling is in limited access for hand-picked project. Please request your access by sending en email to silvio [dot] giancola [at] kaust [dot] edu [dot] sa .

9.2 Is there a limitation in the number of projects/images?

CloudLabeling is in limited access for hand-picked users. We currently do not have limit in the number of projects/images for those hand-picked users.

9.3 How long does it takes to train a model?

The training time is proportional to the number of images you have uploaded. That time appears in the main landing page.

9.4 Do I need a GPU to train my model?

No, everything is handled in the cloud on dedicated servers. Same with inference.