
CloudLabeling.org

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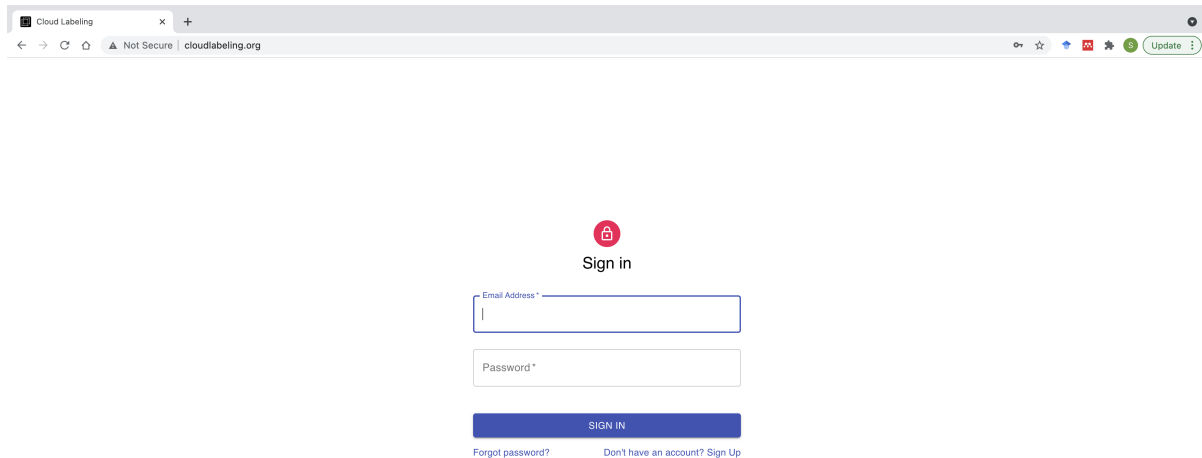
Cloud Labeling: Object Detection Platform for Dataset Annotation and Detection Models Training

CREATE AN ACCOUNT

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

SIGN IN CLOUDLABELING

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

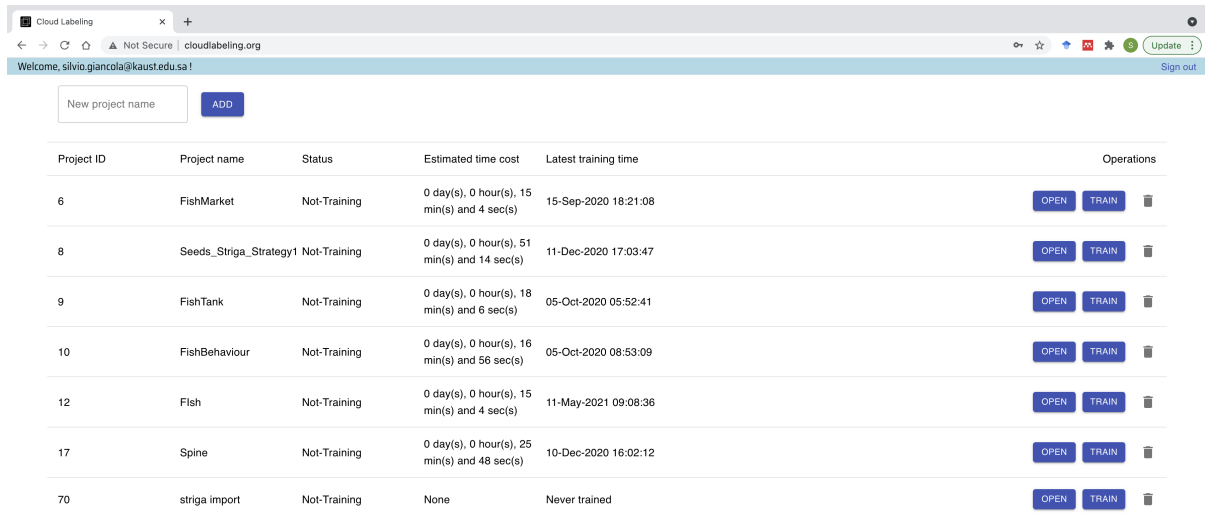


The screenshot shows a web browser window with the address bar displaying "cloudlabeling.org". The page content is centered and features a red lock icon above the text "Sign in". Below this, there are two input fields: "Email Address*" and "Password*". A blue "SIGN IN" button is positioned below the password field. At the bottom of the form, there are two links: "Forgot password?" and "Don't have an account? Sign Up".

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

CREATE A PROJECT

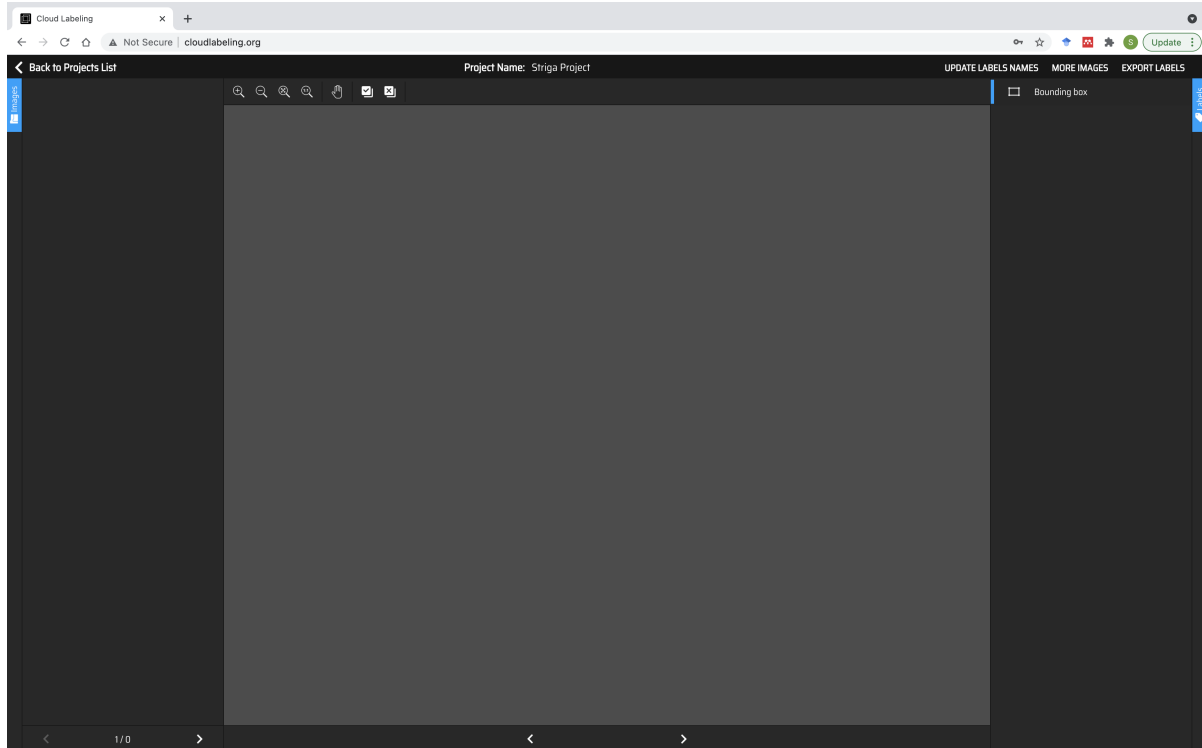
To create a project, type a name in the box “New Project Name” and click on “Add”.



The screenshot shows the Cloud Labeling web interface. At the top, there's a navigation bar with a welcome message and a sign out button. Below it, there's a form to create a new project with a text input field labeled "New project name" and an "ADD" button. The main part of the interface is a table listing existing projects. Each row contains the Project ID, Project name, Status, Estimated time cost, Latest training time, and a set of operations (OPEN, TRAIN, and a trash icon).

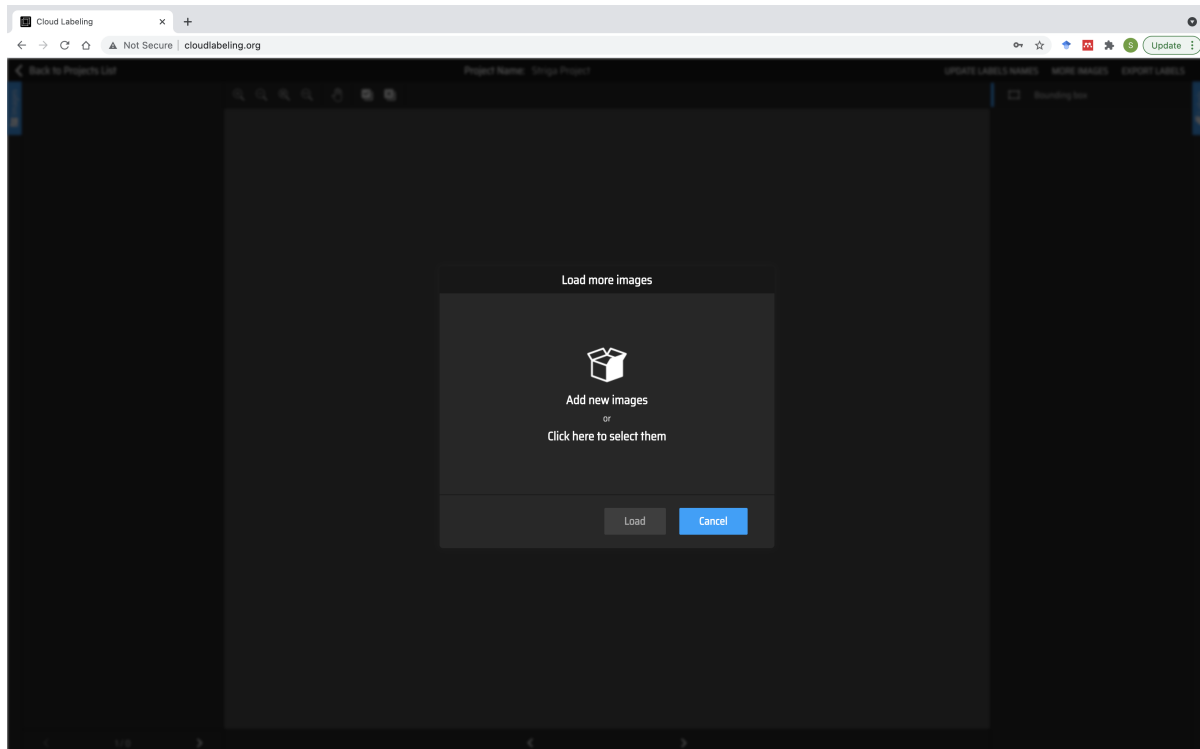
Project ID	Project name	Status	Estimated time cost	Latest training time	Operations
6	FishMarket	Not-Training	0 day(s), 0 hour(s), 15 min(s) and 4 sec(s)	15-Sep-2020 18:21:08	OPEN TRAIN
8	Seeds_Striga_Strategy1	Not-Training	0 day(s), 0 hour(s), 51 min(s) and 14 sec(s)	11-Dec-2020 17:03:47	OPEN TRAIN
9	FishTank	Not-Training	0 day(s), 0 hour(s), 18 min(s) and 6 sec(s)	05-Oct-2020 05:52:41	OPEN TRAIN
10	FishBehaviour	Not-Training	0 day(s), 0 hour(s), 16 min(s) and 56 sec(s)	05-Oct-2020 08:53:09	OPEN TRAIN
12	Fish	Not-Training	0 day(s), 0 hour(s), 15 min(s) and 4 sec(s)	11-May-2021 09:08:36	OPEN TRAIN
17	Spine	Not-Training	0 day(s), 0 hour(s), 25 min(s) and 48 sec(s)	10-Dec-2020 16:02:12	OPEN TRAIN
70	striga import	Not-Training	None	Never trained	OPEN TRAIN

Once your project is created, you can “Open” it.



UPLOAD DATASET

Upload your images by clicking on “More Images”.

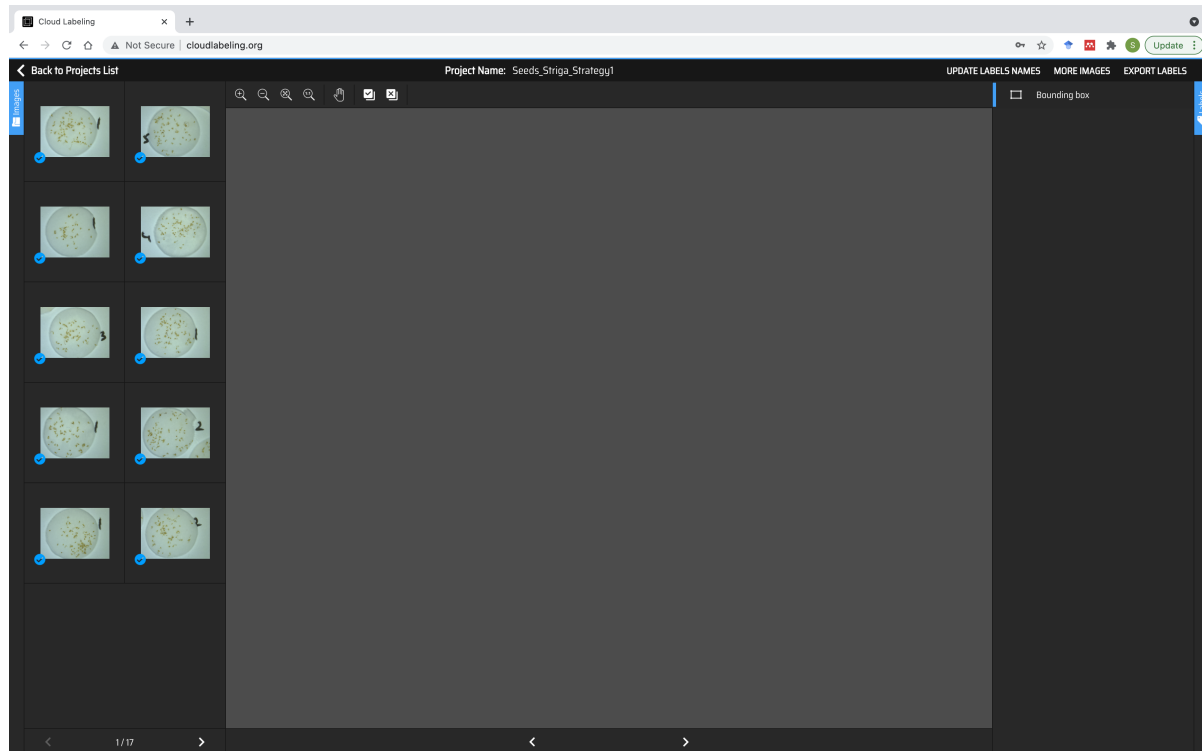


Either Drag and Drop images, or find them on your computer.

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.

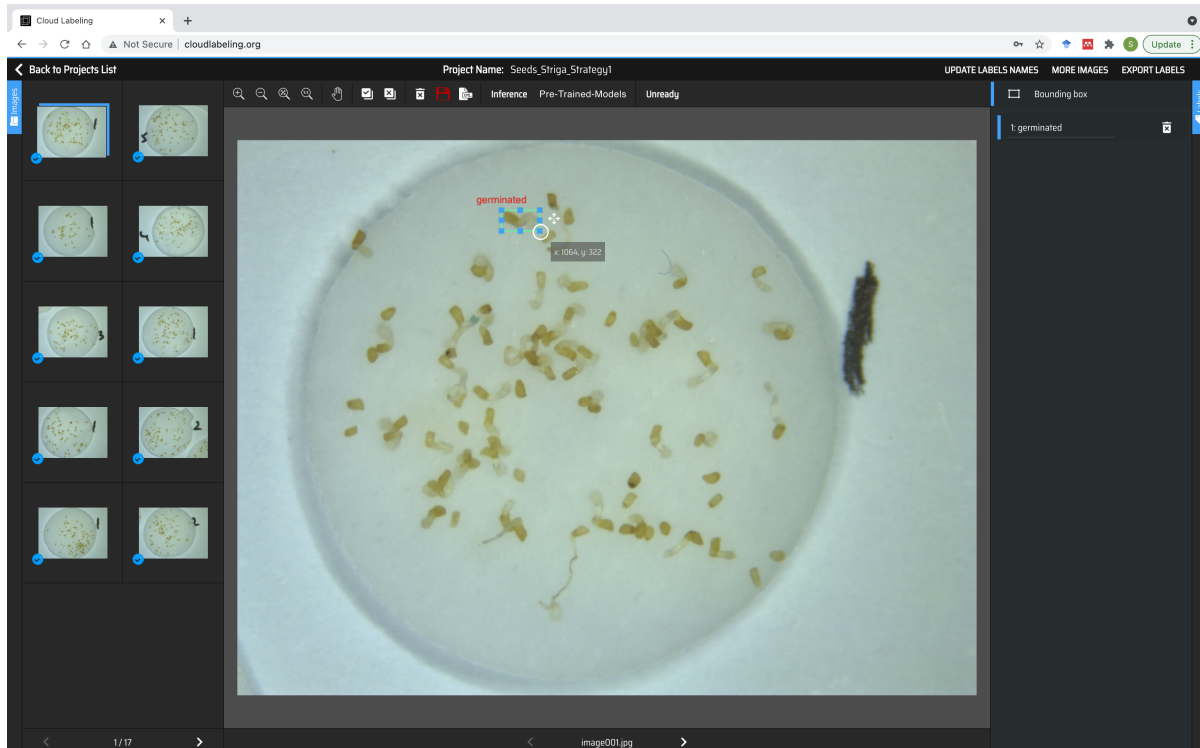


ANNOTATE IMAGES

5.1 1. Manual Annotation

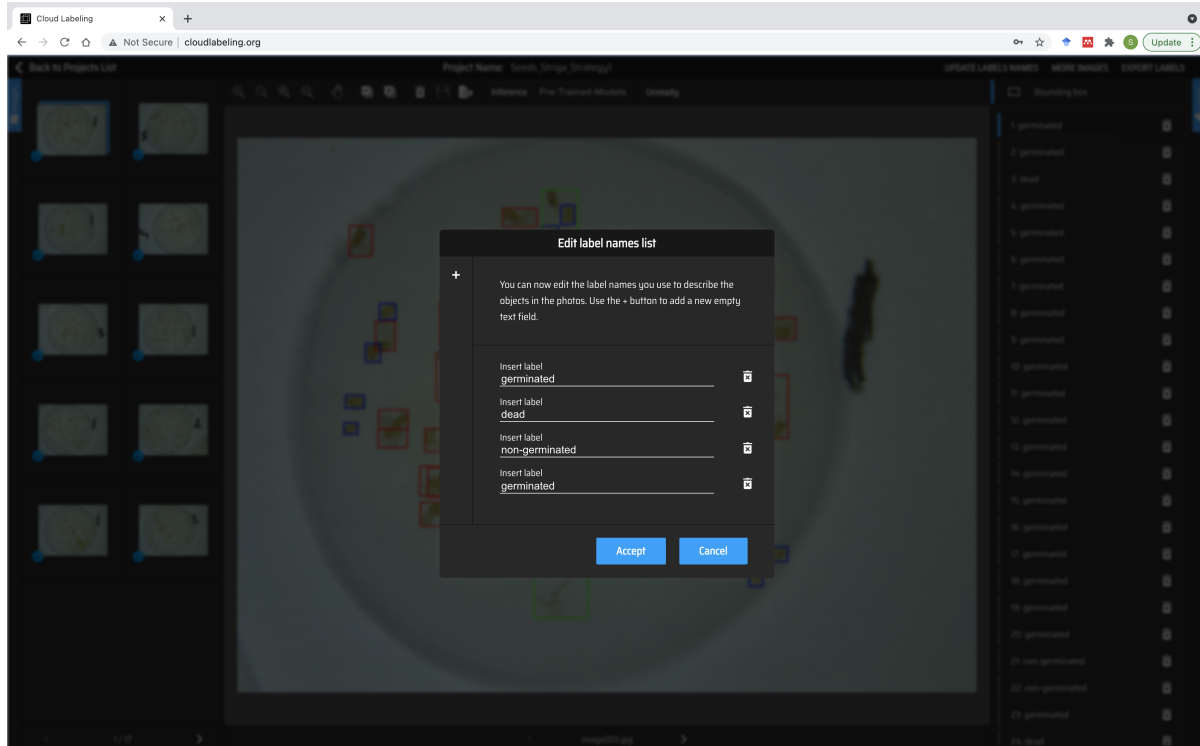
Select the image you want to annotate on the left panel.

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

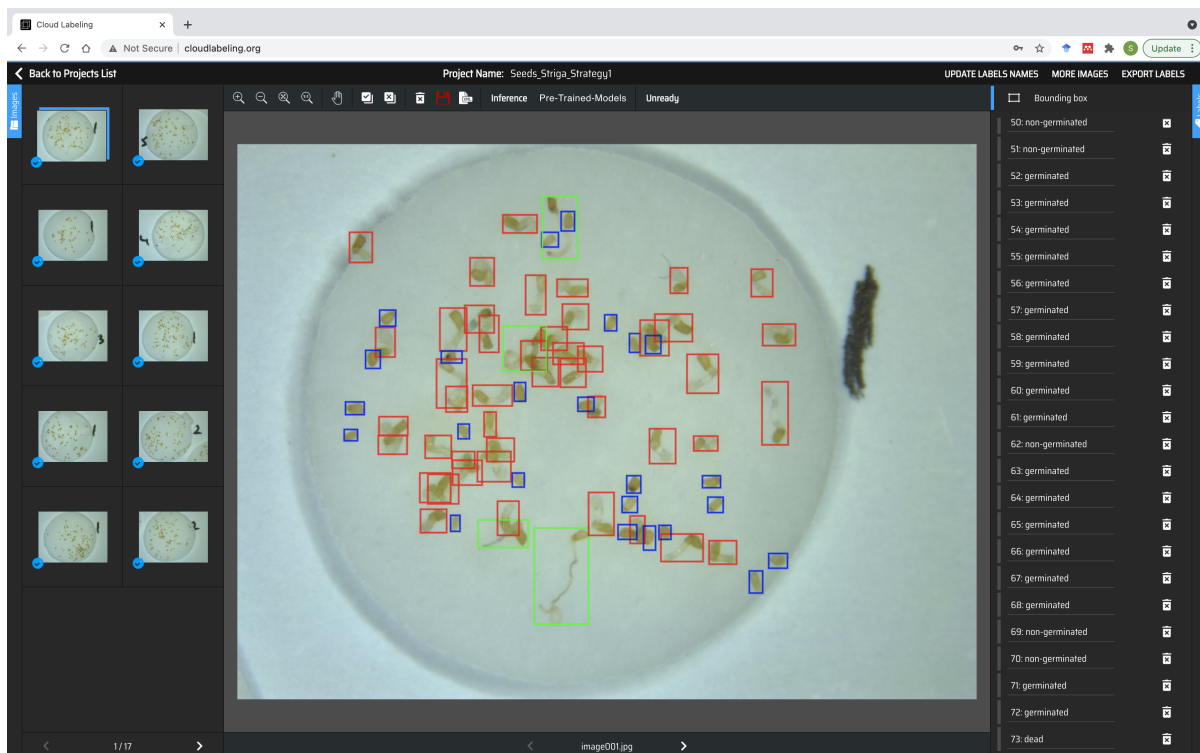


Make sure to give your object a class name on the right panel.

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



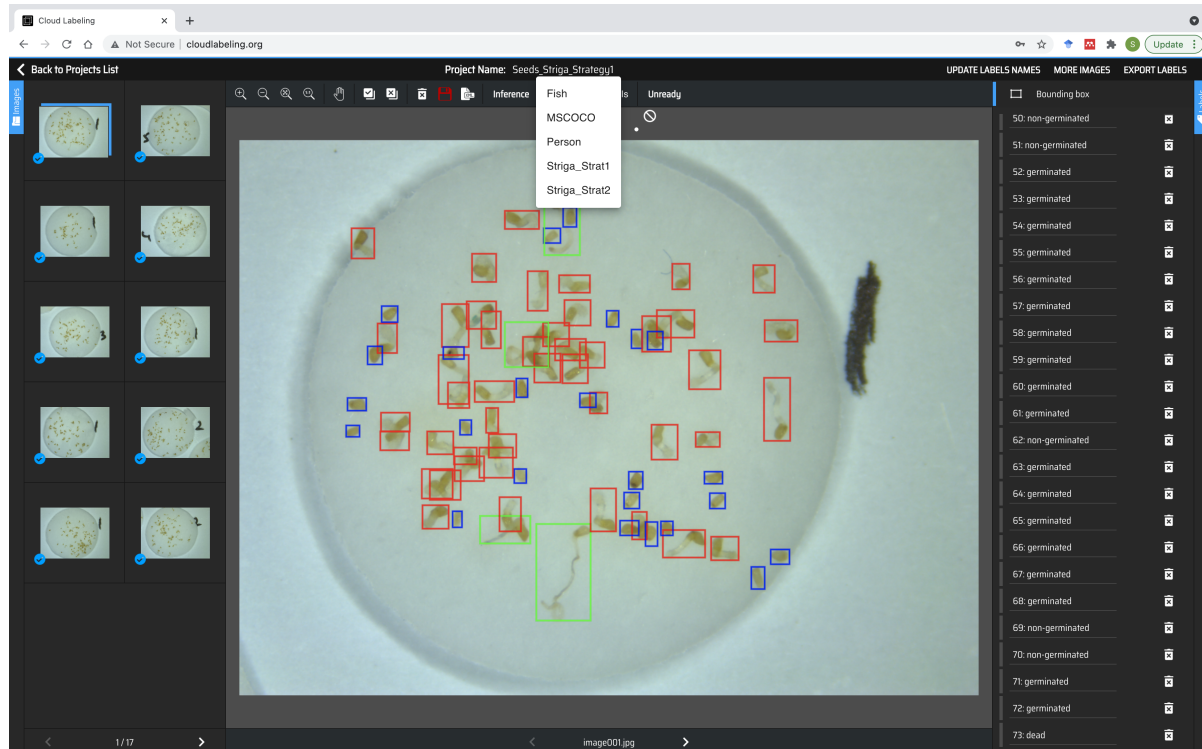
Once your annotations are complete, make sure to save them by clicking on the red “Save” button.



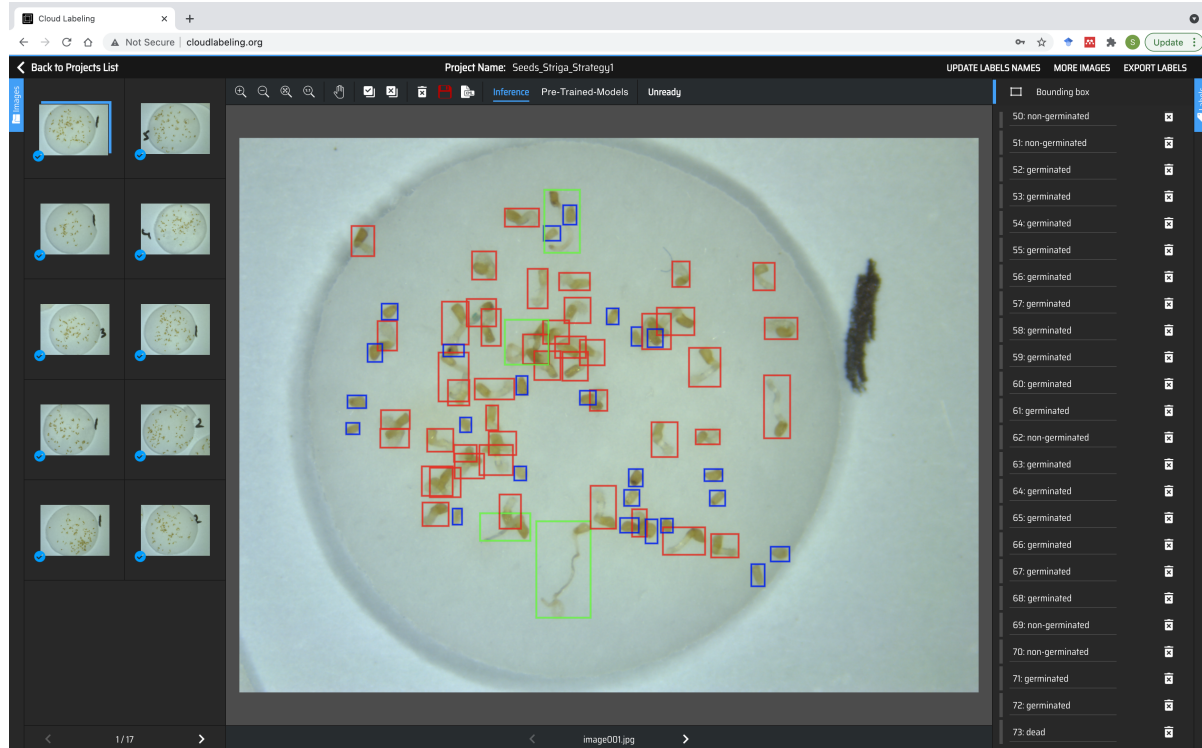
5.2 2. Automatic annotations

You can automatically annotate your 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).



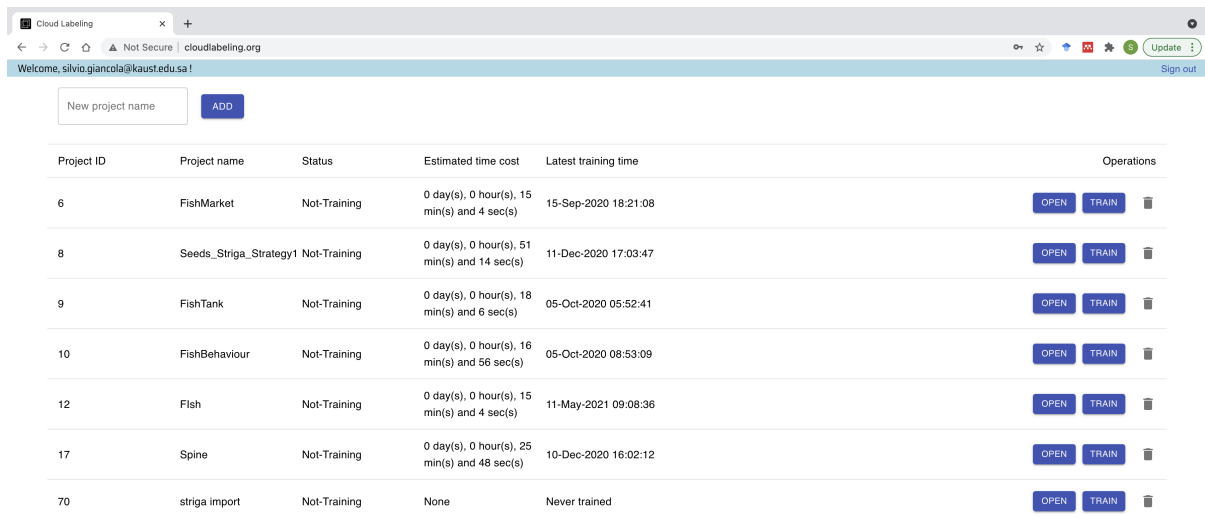
Note that once you have pre-trained your own model, you can also infer your model on those images with the button “Inference”.



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 screenshot shows the Cloud Labeling web interface. At the top, there's a header with the site name and a welcome message. Below that, there's a form to add a new project. The main part of the interface is a table listing existing projects. Each row in the table contains the Project ID, Project name, Status, Estimated time cost, Latest training time, and Operations (Open, Train, and a delete icon).

Project ID	Project name	Status	Estimated time cost	Latest training time	Operations
6	FishMarket	Not-Training	0 day(s), 0 hour(s), 15 min(s) and 4 sec(s)	15-Sep-2020 18:21:08	OPEN TRAIN
8	Seeds_Striga_Strategy1	Not-Training	0 day(s), 0 hour(s), 51 min(s) and 14 sec(s)	11-Dec-2020 17:03:47	OPEN TRAIN
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17	Spine	Not-Training	0 day(s), 0 hour(s), 25 min(s) and 48 sec(s)	10-Dec-2020 16:02:12	OPEN TRAIN
70	striga import	Not-Training	None	Never trained	OPEN TRAIN

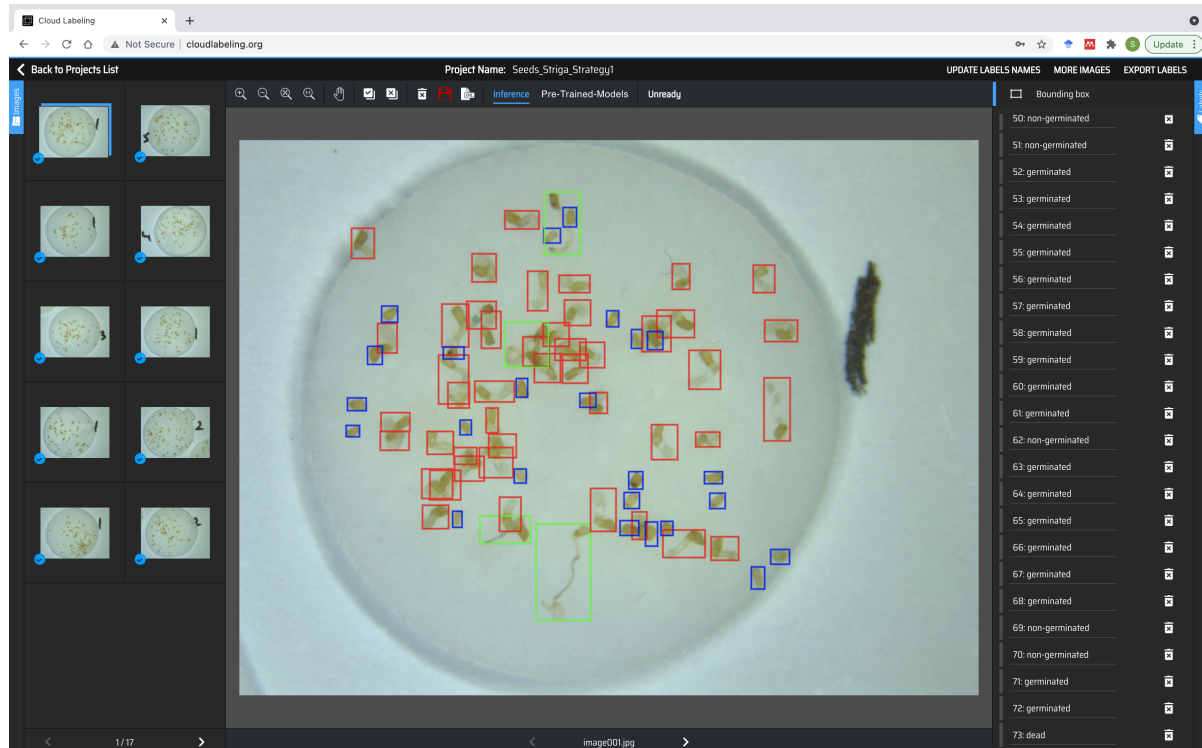
The interface will inform you whether it is currently training, the estimated time for the training of the model, and when was the last training performed.

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

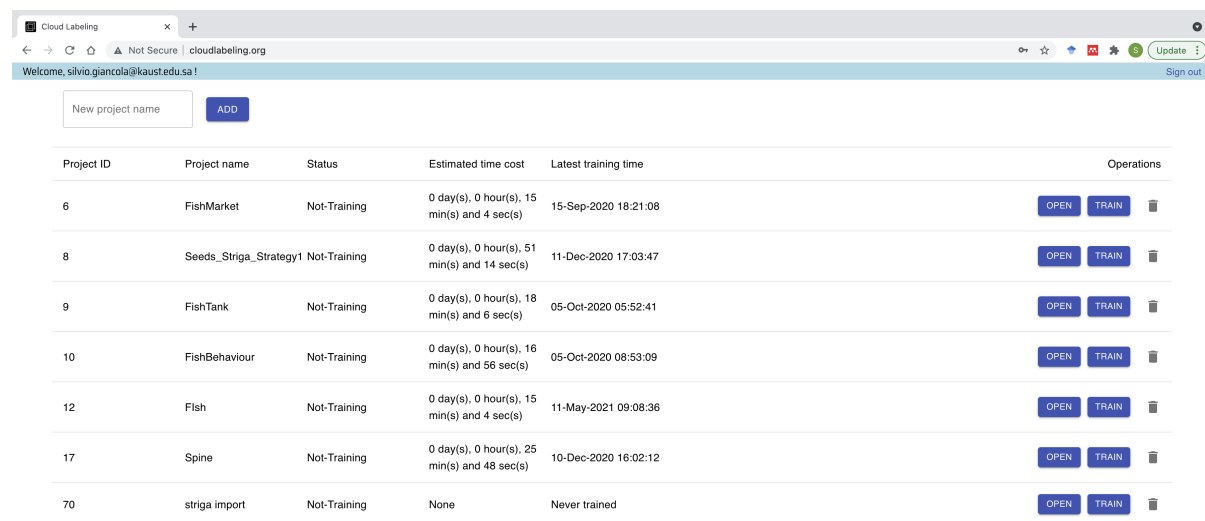
You can remote infer image by sending your image in our server.

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.



The screenshot shows the CloudLabeling web interface. At the top, there's a header with the CloudLabeling logo and a 'Sign out' button. Below the header, there's a 'New project name' input field and an 'ADD' button. The main content is a table listing projects. The table has columns for Project ID, Project name, Status, Estimated time cost, Latest training time, and Operations. The Operations column contains 'OPEN' and 'TRAIN' buttons for each project.

Project ID	Project name	Status	Estimated time cost	Latest training time	Operations
6	FishMarket	Not-Training	0 day(s), 0 hour(s), 15 min(s) and 4 sec(s)	15-Sep-2020 18:21:08	OPEN TRAIN
8	Seeds_Striga_Strategy1	Not-Training	0 day(s), 0 hour(s), 51 min(s) and 14 sec(s)	11-Dec-2020 17:03:47	OPEN TRAIN
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70	striga import	Not-Training	None	Never trained	OPEN TRAIN

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>.

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
```


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.