



# Database building

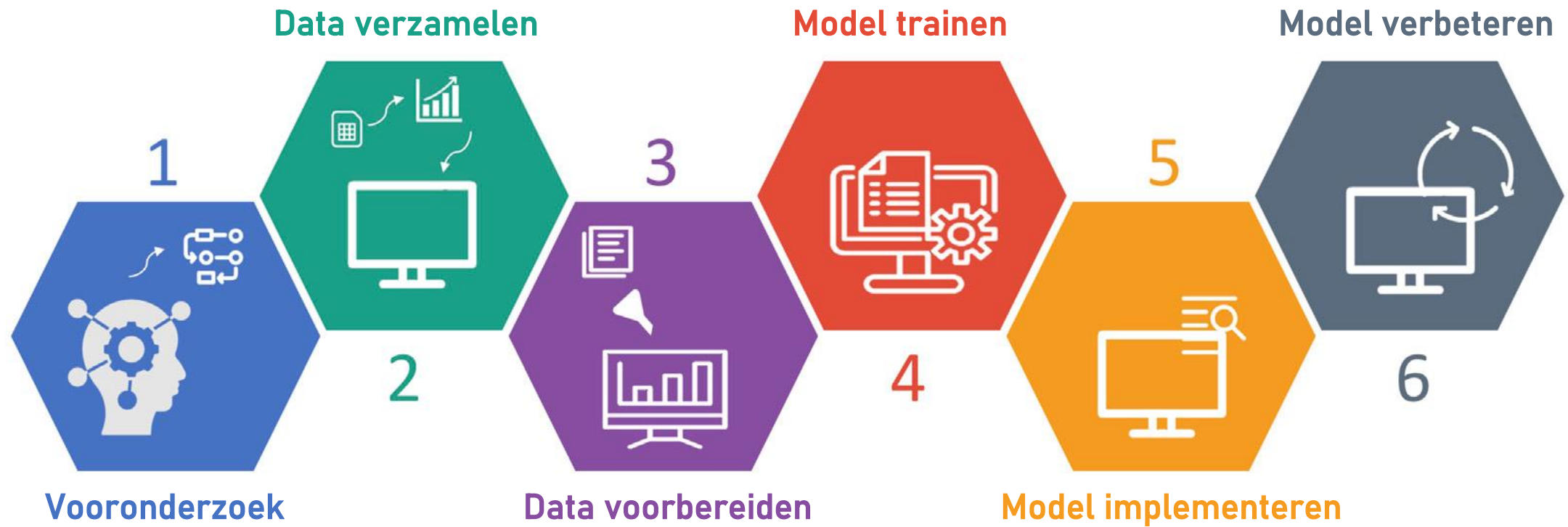
**28/03/2023**

**Ritchie Heirmans**

# Data vergaren

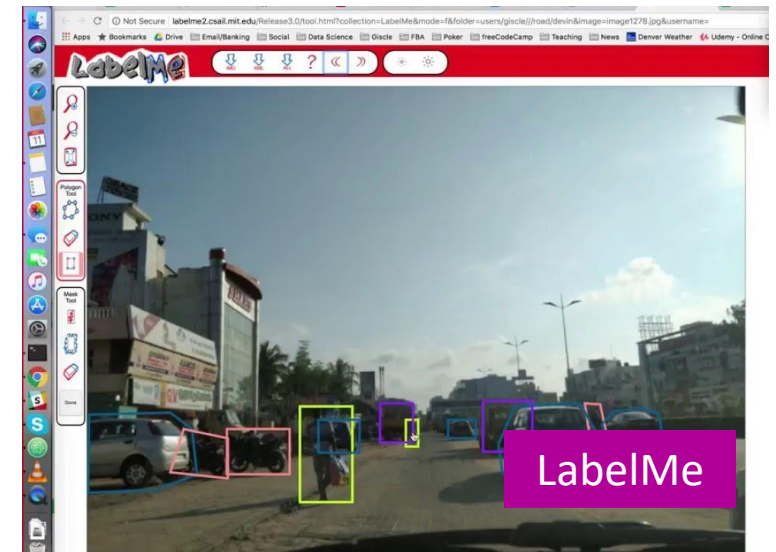
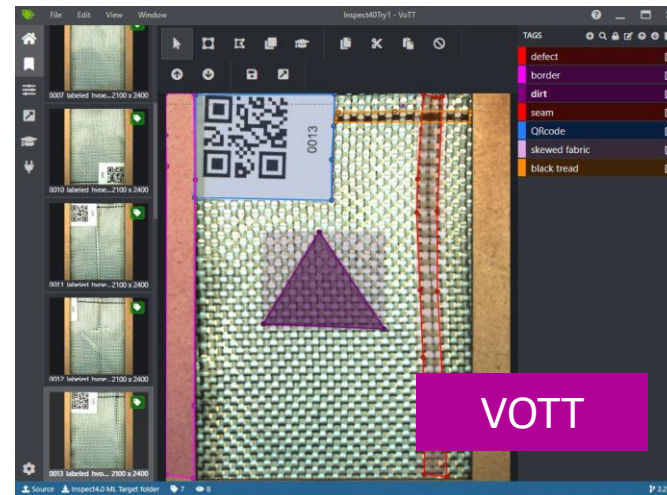
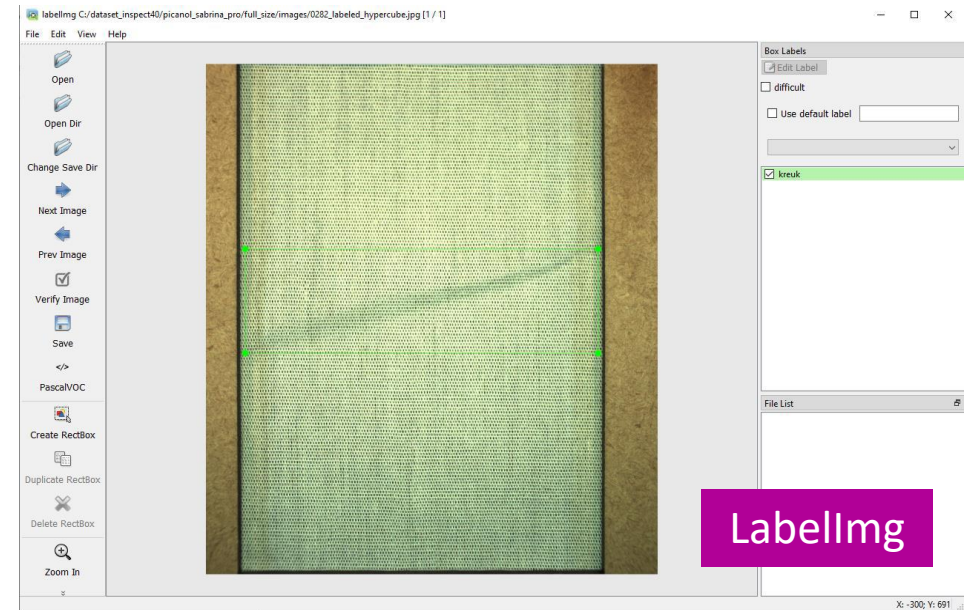
- Eigen data
  - Camerasetup
- Online datasets
  - Kaggle
  - TILDA
  - MVTEC ANOMALY DETECTION DATASET
  - DAGM 2007 dataset

# De structuur van een Image Classification/Segmentation taak:



# Data annoteren

## ■ Annotatie software selectie





hive.com

<https://hive.com> > blog > annotatio... · Vertaal deze pagina

## Top 6 Annotation Tools To Mark Up Documents - Hive

1 fe

Sup



geekflare.com

<https://geekflare.com> > ... > Design · Vertaal deze pagina

## 10 Best Image Annotation Tools for Efficient Labeling in 2023

7 mrt 2023

easi



v7labs.com

<https://www.v7labs.com> > Blog · Vertaal deze pagina

## 13 Best Image Annotation Tools of 2023 [Reviewed] - V7 Labs

V7; Labelbox; Scale AI; SuperAnnotate; Dataloop; Playment; Supervise.ly; Hive Data; CVAT; LabelMe; Labeling; VoTT; Img Lab ...

[Labelbox](#) · [Scale AI](#) · [SuperAnnotate](#) · [CVAT](#)

## 24 Best Annotation Software Tools (Free & Paid Apps

22 mrt 2023 — So, What Are **Annotation Tools**? ♀. Simply put, they are text or drawing tools that help us add information to text, video, or image ...

[ClickUp](#) · [nTask](#) · [zipBoard](#) · [Dropbox](#)

**COMPUTER  
VISION ANNOTATION TOOL**

**CVAT**



# Waarom CVAT

- Web interface :
  - Lokale server (Open Source)
  - betalende optie
- Collaboratief
- Ondersteund verschillende bestandsformaten
- Verschillende tools:
  - ellipse, bounding box, polygon, marker
  - tracking
  - model-assisted labelling
- Exporteert verschillende dataset formaten

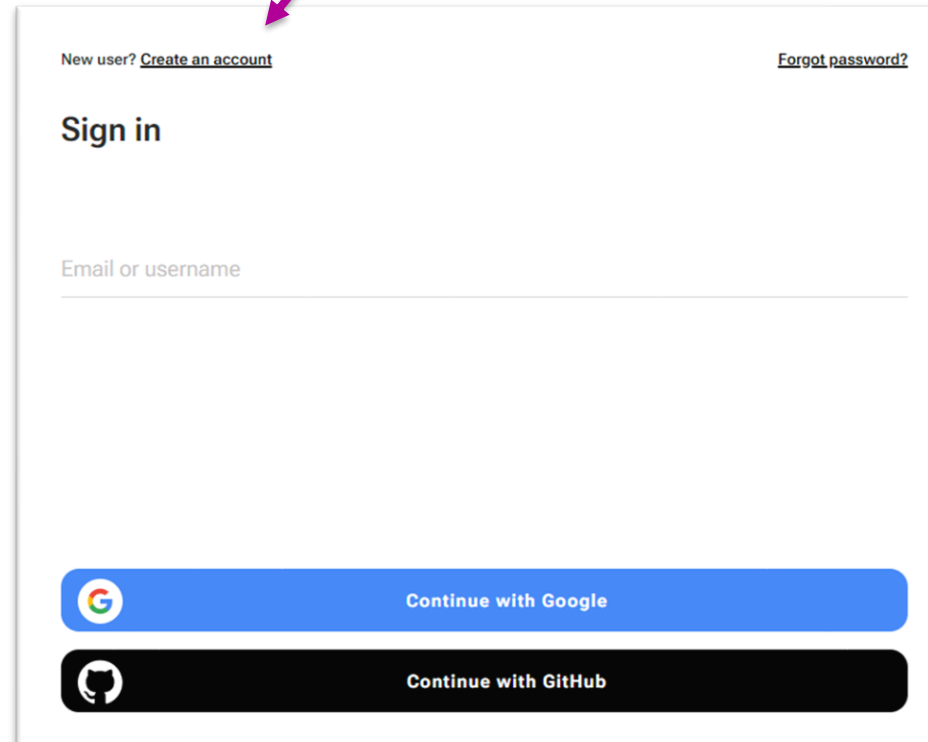
# CVAT



- Surf naar:

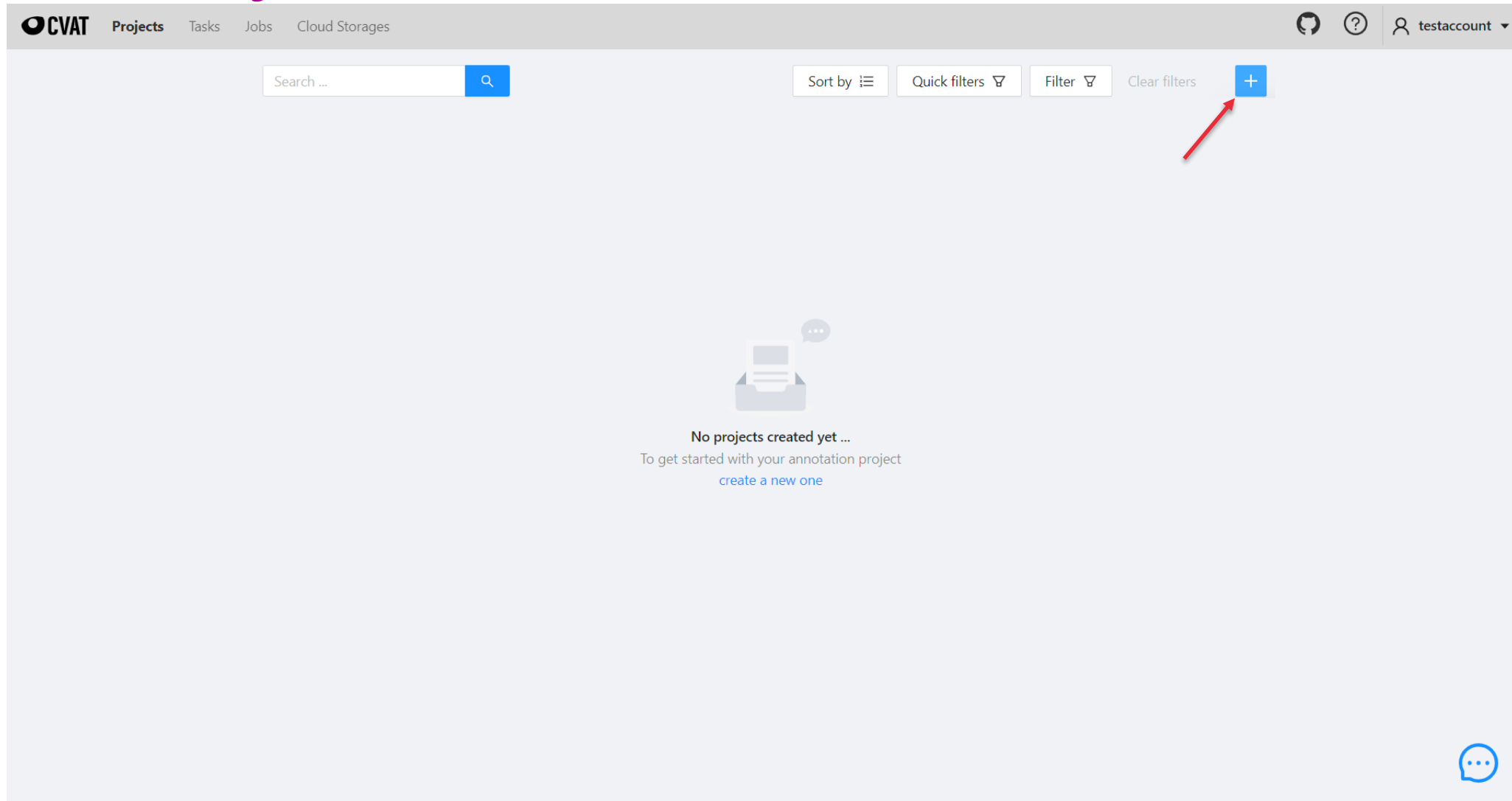
<https://app.cvat.ai/auth/login>

- Maak een account,  
of log in.

A screenshot of the CVAT login page. At the top left, it says "New user? [Create an account](#)". At the top right, it says "[Forgot password?](#)". Below this is the heading "Sign in". There is a text input field labeled "Email or username". At the bottom, there are two buttons: a blue button with the Google logo and the text "Continue with Google", and a black button with the GitHub logo and the text "Continue with GitHub". A pink arrow points from the top of the page towards the "Create an account" link.



# Nieuw Project



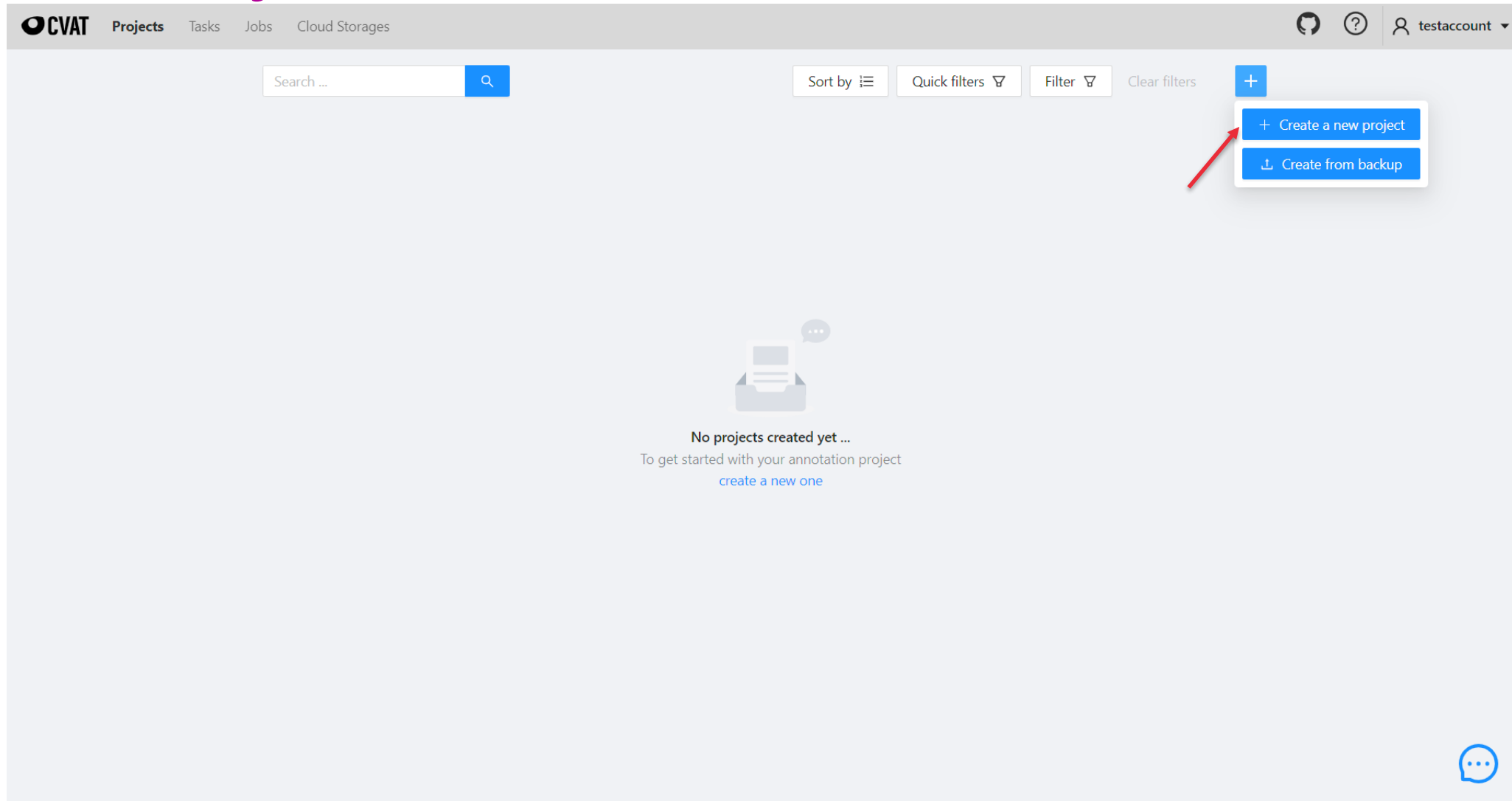
CVAT Projects Tasks Jobs Cloud Storages

Search ...

Sort by Quick filters Filter Clear filters +

No projects created yet ...  
To get started with your annotation project  
[create a new one](#)

# Nieuw Project



CVAT Projects Tasks Jobs Cloud Storages

Search ...

Sort by Quick filters Filter Clear filters +

- + Create a new project
- ↓ Create from backup

No projects created yet ...  
To get started with your annotation project  
[create a new one](#)

# Nieuw Project

## Create a new project

\* Name

 ✓

Labels:

Raw  Constructor

1 →

2 →

> Advanced configuration

# Nieuw Project

Create a new project

\* Name  
Textile Annotation Workshop

Labels:  
Raw Constructor

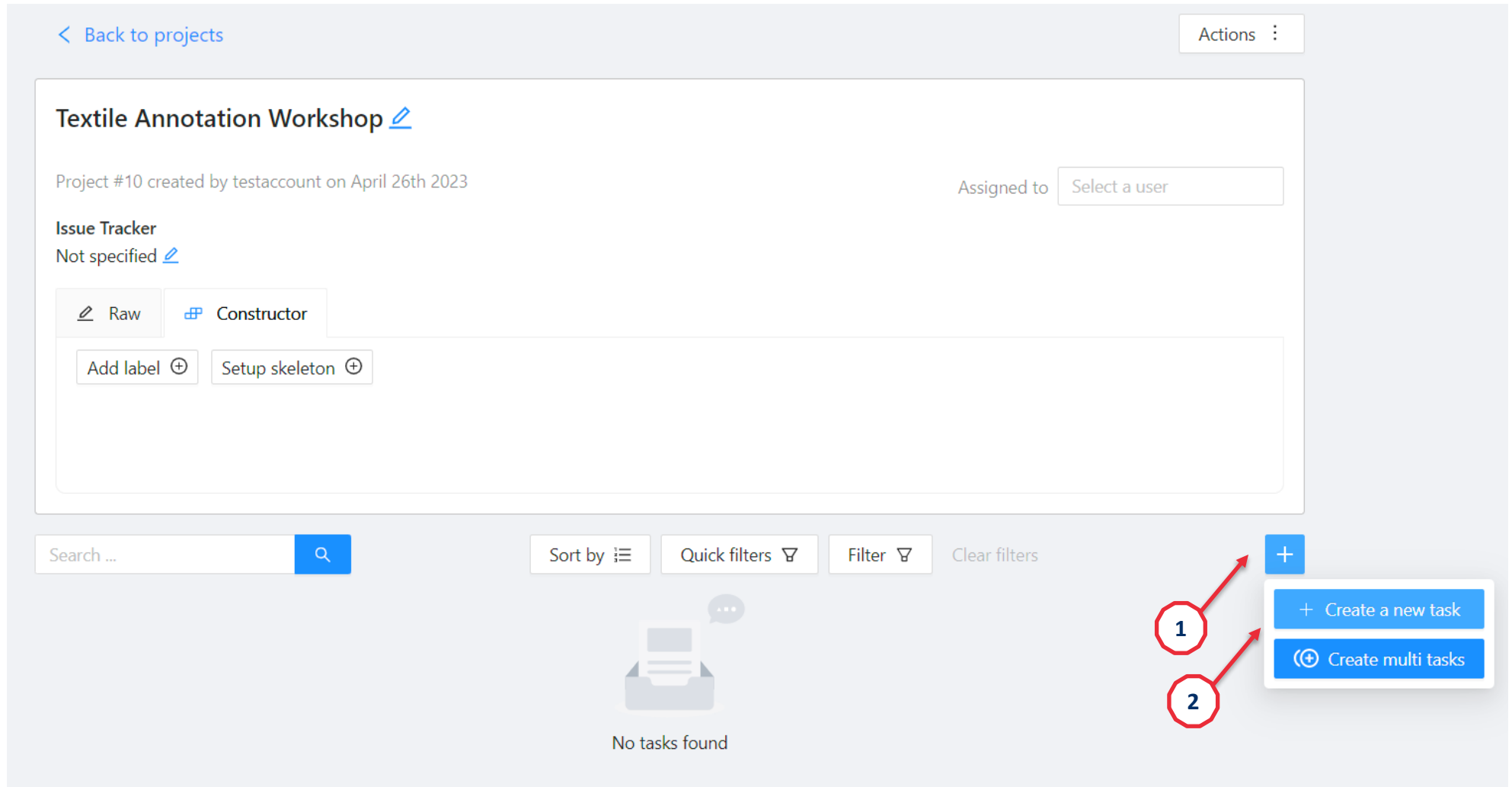
hole  Any    Add an attribute

1

2 > Advanced configuration

3

# Nieuwe Taak



The screenshot shows the CVAT interface for a project named "Textile Annotation Workshop". The project was created by "testaccount" on April 26th, 2023. It is currently assigned to "Select a user". The "Issue Tracker" is set to "Not specified". The interface includes tabs for "Raw" and "Constructor", and buttons for "Add label" and "Setup skeleton". At the bottom, there is a search bar, sorting options, and a "No tasks found" message. A red circle with the number "1" and an arrow points to a blue "+" button in the bottom right corner. A second red circle with the number "2" and an arrow points to a dropdown menu that contains two options: "+ Create a new task" and "⊕ Create multi tasks".

# Nieuwe Taak

## Create a new task

Basic configuration

\* Name

Project


Subset

Labels

Project labels will be used

\* Select files

[My computer](#) [Connected file share](#) [Remote sources](#) [Cloud Storage](#)



Click or drag files to this area

You can upload an archive with images, a video, or multiple images

> Advanced configuration

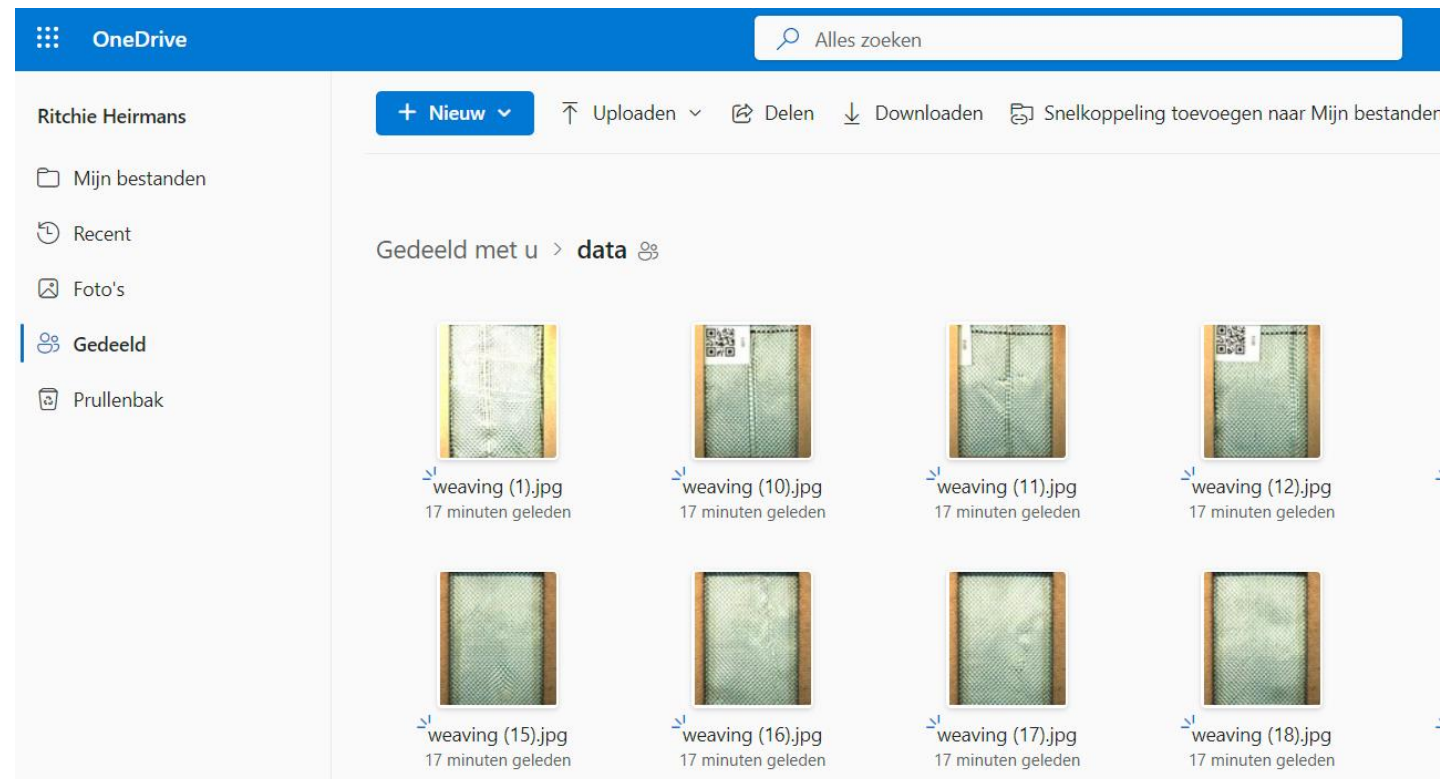
[Submit & Open](#) [Submit & Continue](#)

# Nieuwe Taak

Connecteer terug met UA-Guest

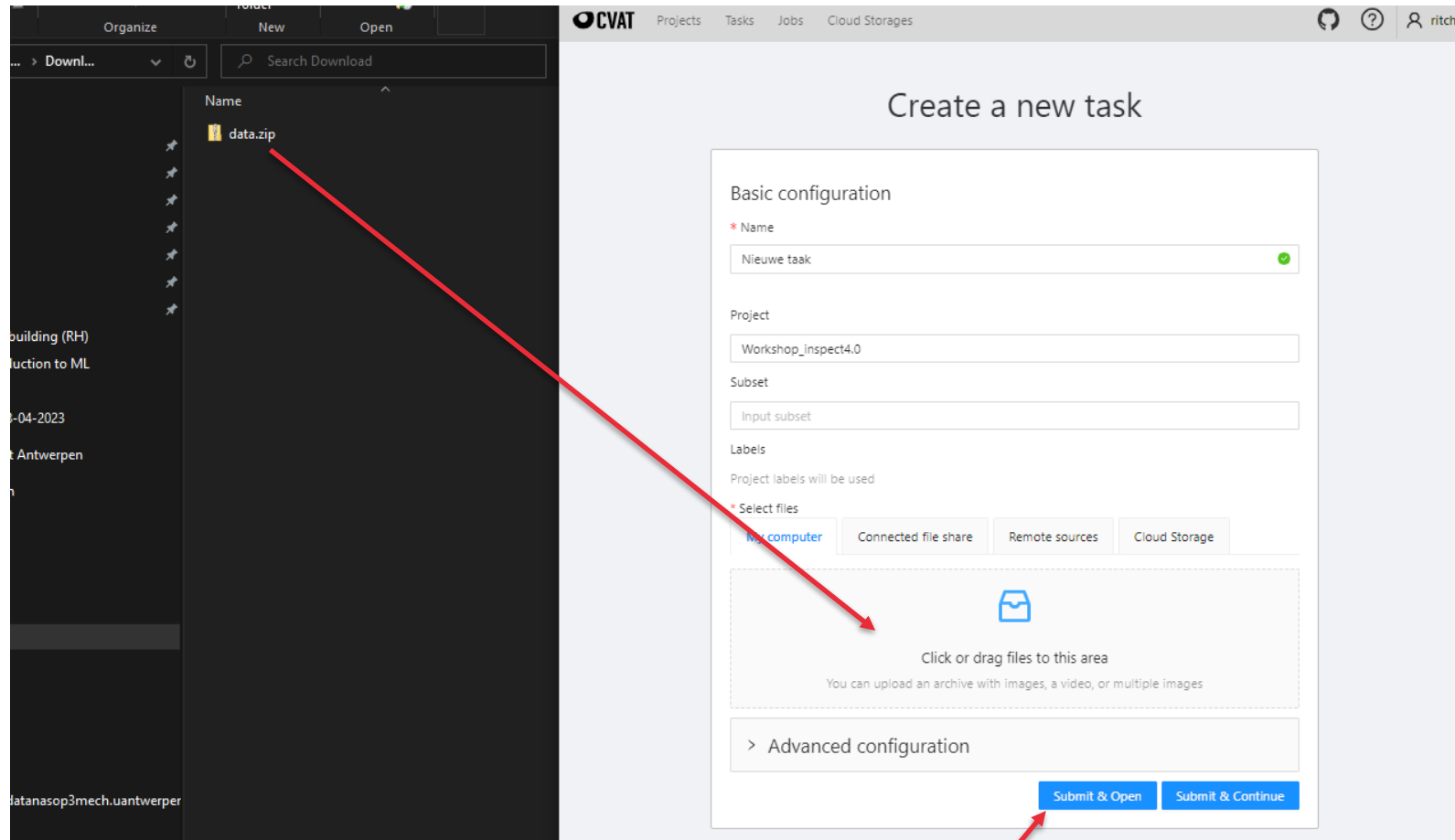
Download dataset

URL op: [bit.ly/Inspect4](https://bit.ly/Inspect4)



# Nieuwe Taak

## Importeer dataset

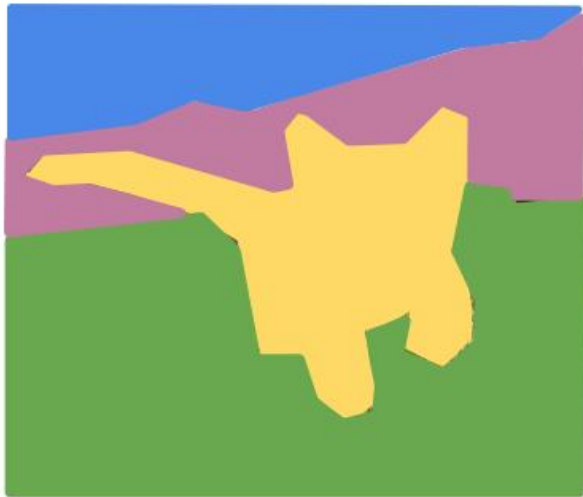


The image shows a composite screenshot illustrating the process of creating a new task in CVAT. On the left, a file explorer window displays a file named 'data.zip' in the 'Downloads' folder. A red arrow points from this file to the 'Select files' section of the CVAT 'Create a new task' form. The form includes fields for 'Name' (filled with 'Nieuwe taak'), 'Project' (filled with 'Workshop\_inspect4.0'), and 'Subset' (filled with 'Input subset'). Below these fields are tabs for 'My computer', 'Connected file share', 'Remote sources', and 'Cloud Storage'. A large dashed box with a folder icon and the text 'Click or drag files to this area' is positioned below the tabs. At the bottom of the form, there are two buttons: 'Submit & Open' and 'Submit & Continue'. A second red arrow points to the 'Submit & Open' button.



# Soorten van taken

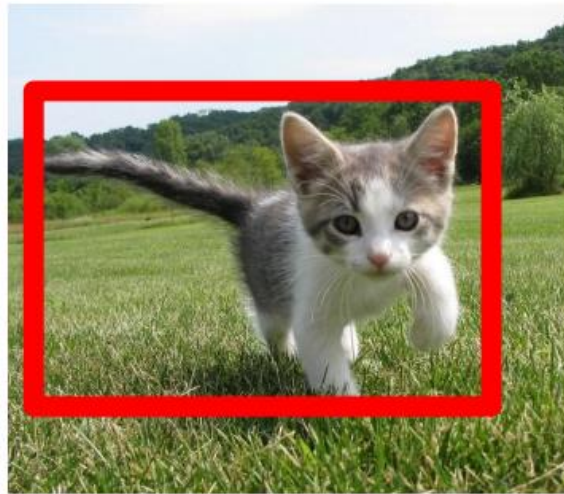
## Semantic Segmentation



GRASS, CAT,  
TREE, SKY

No objects, just pixels

## Classification + Localization



CAT

Single Object

## Object Detection



DOG, DOG, CAT

Multiple Object

## Instance Segmentation



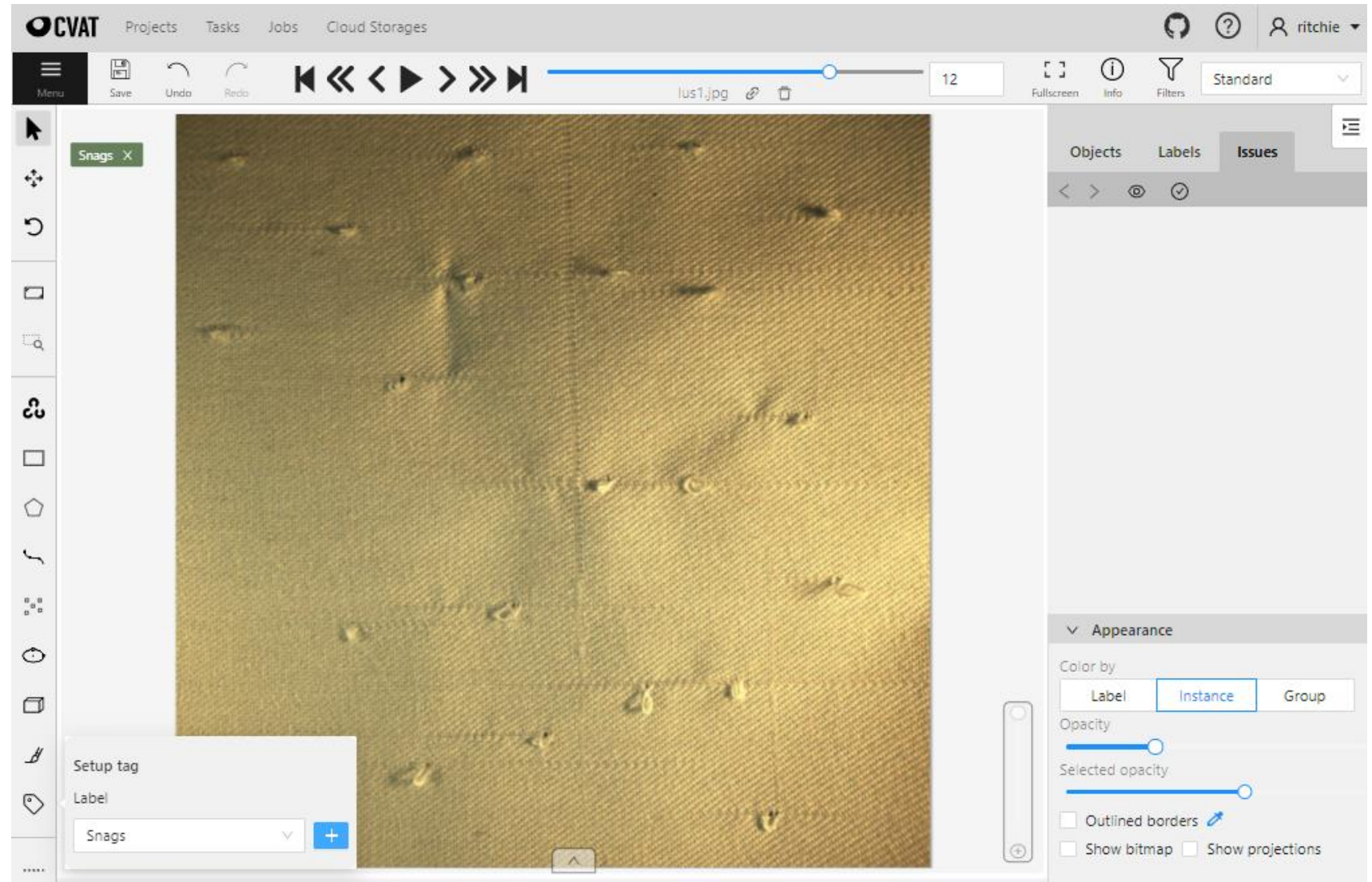
DOG, DOG, CAT

This image is CC0 public domain

# Soorten van taken

## Classificatie

## Tag

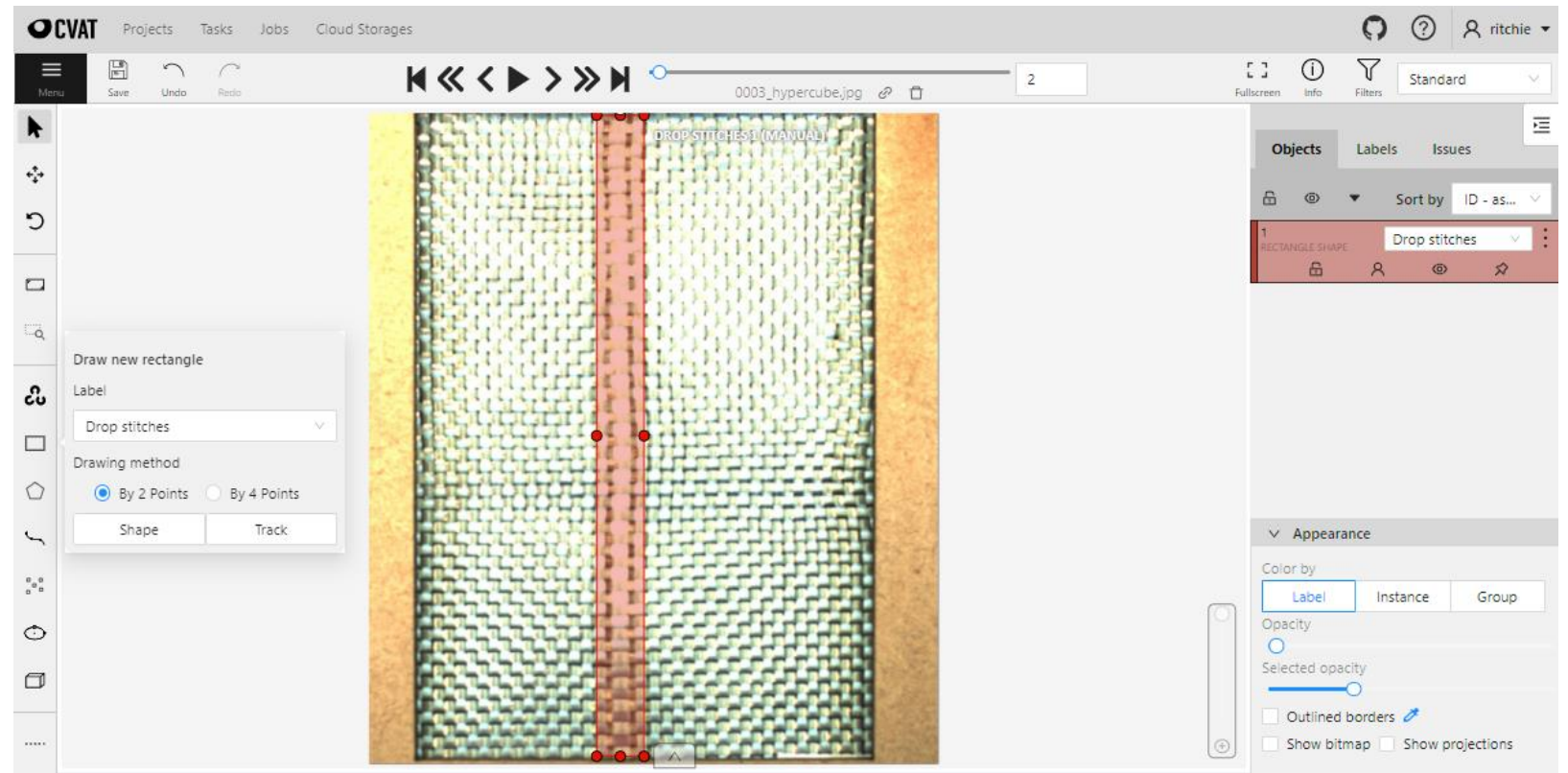




# Soorten van taken

## Classificatie + Localisatie

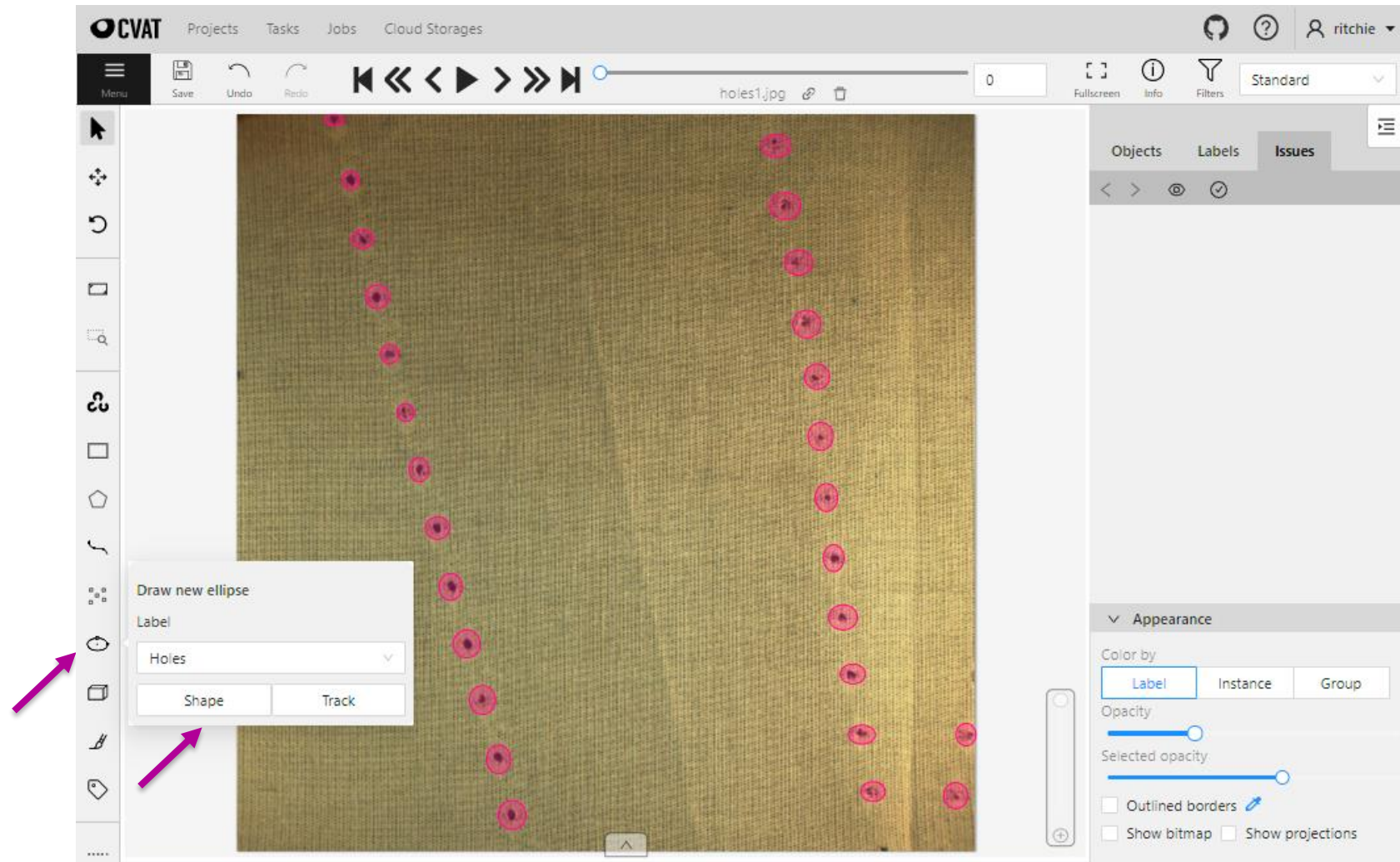
### Bounding box



# Soorten van taken

## Segmentatie

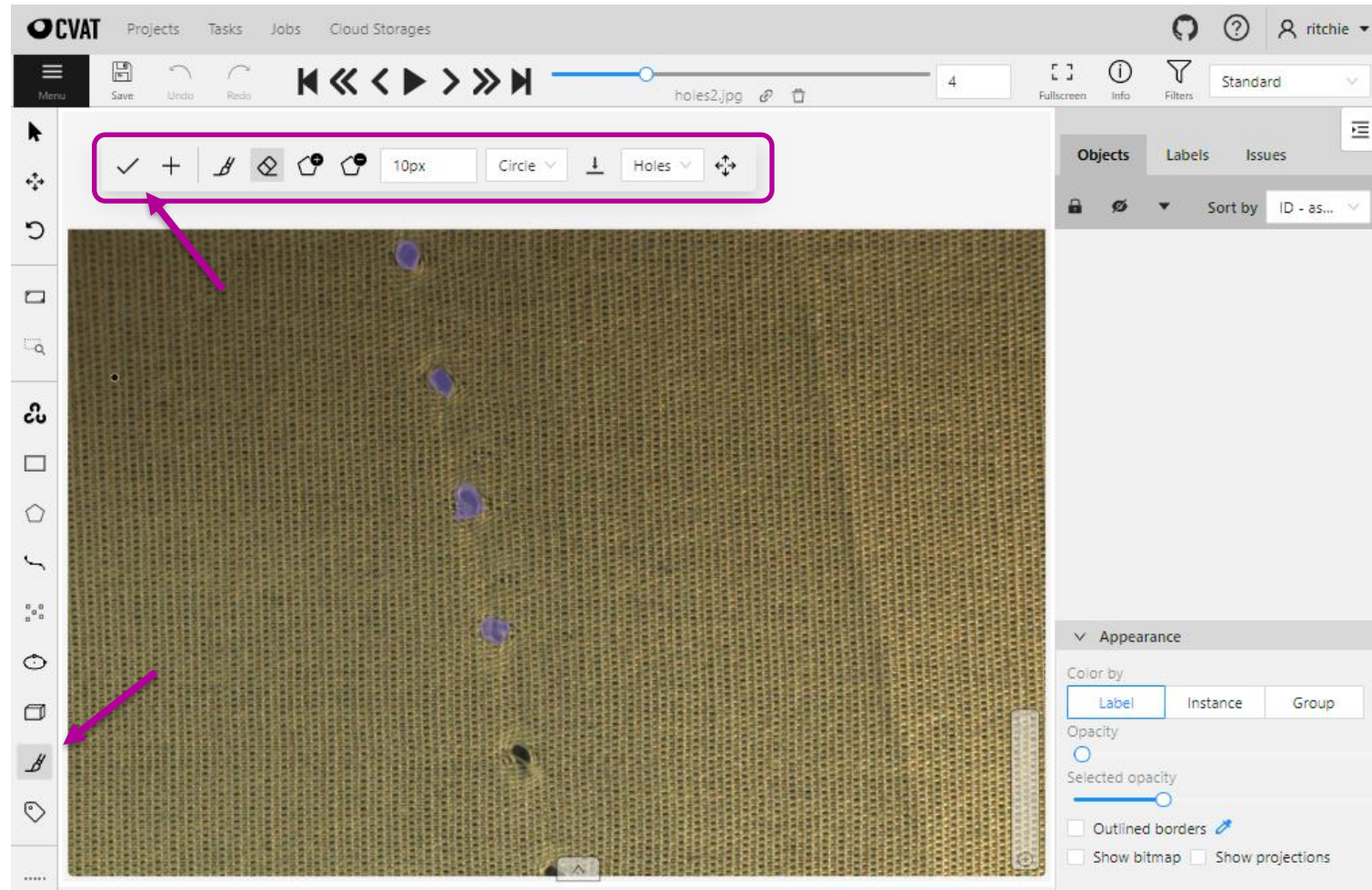
### Ellips



# Soorten van taken

## Segmentatie

## masker

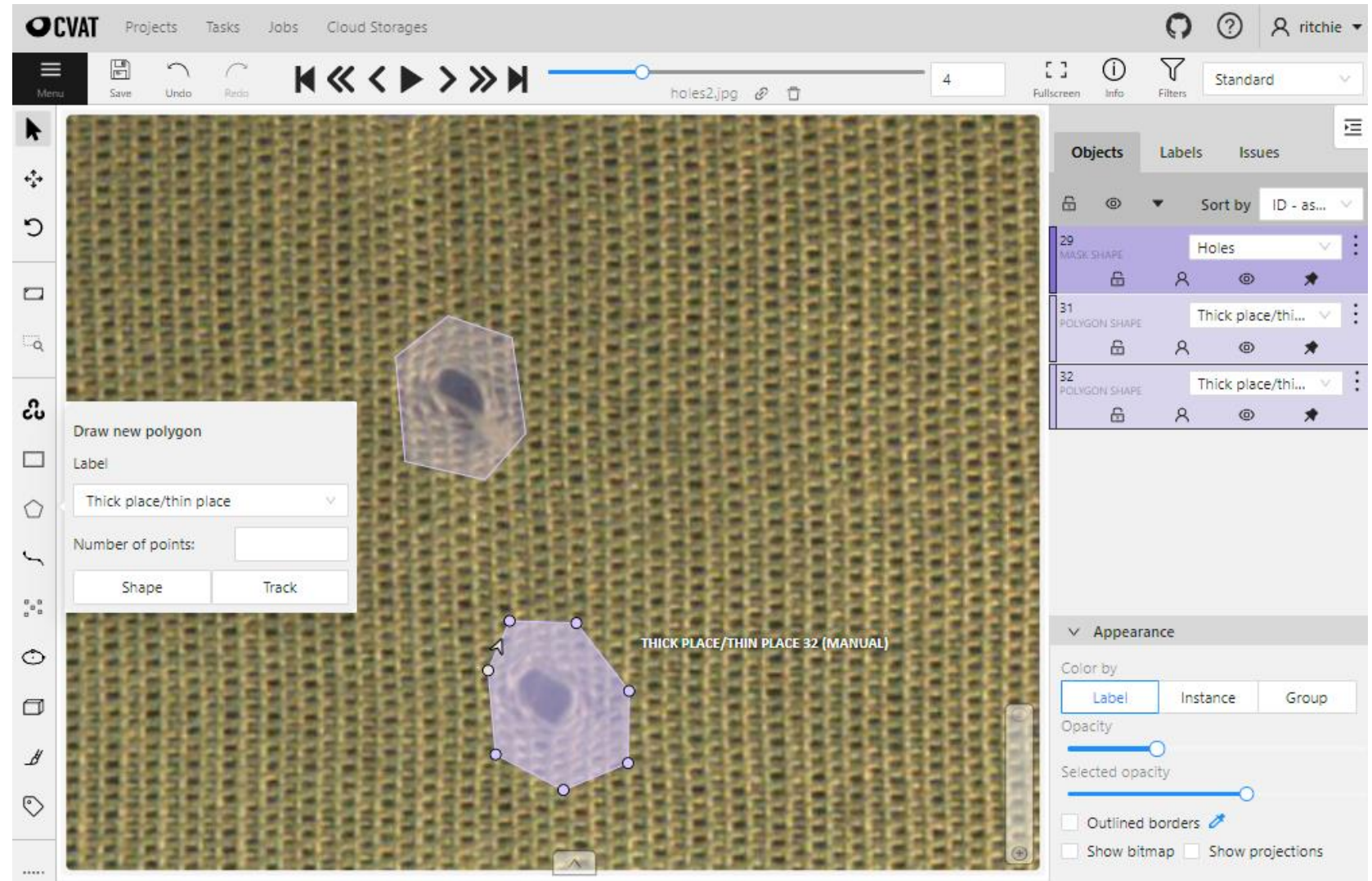




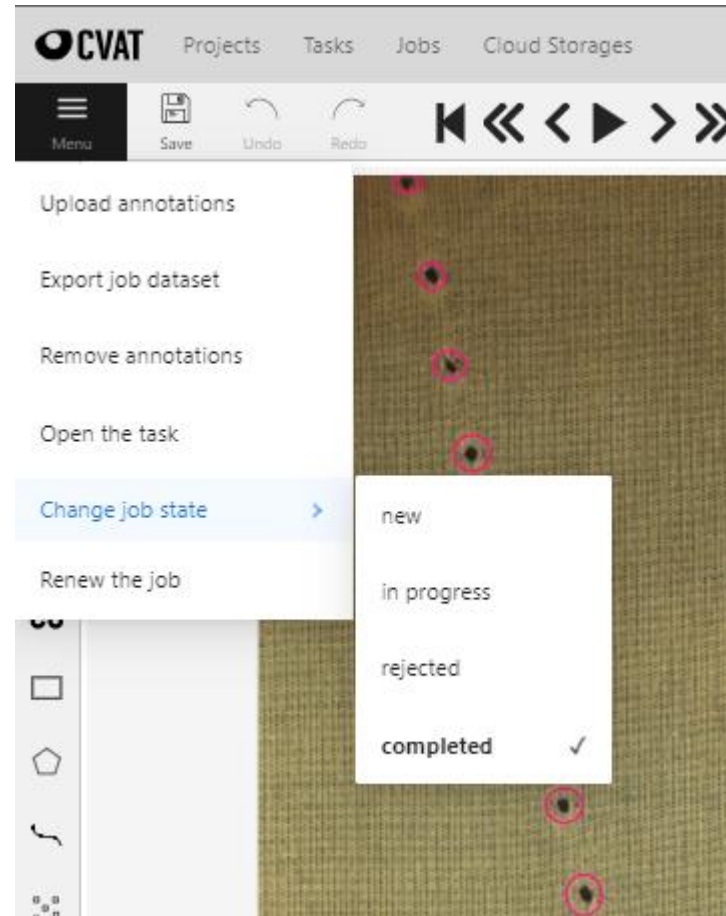
# Soorten van taken

## Segmentatie

polygoon



# Taak afsluiten



# Dataset exporter

