



Title: README for Create COCO Format Annotation

Document Number:

CTI One Corporation

Table 1a. Document History

| | | |
|------------|---|----|
| 2022-08-05 | Establish this document, document archive: /media/harry/easystore1/backup-2020-2-15/CTI/ 3proejcts/3-8-smart-tech/3-8-4-CTI/3-8-4-6-products/ CV100/102-algorithm-source-code-documents/102n- yolact/102n-1-readme-yolact\$ | ZW |
| 2022-09-12 | Update | YY |

Table 1b. Testing and Release Approval Form

| | | |
|------------|---|--|
| 2022-09-12 | Tested by ZW and approved for release by HL | Pending for testing and approval |
| | | |

Table 2. References

| Number | Name and URL | Note |
|--------|--|------|
| 1. | VGG Image Annotator https://www.robots.ox.ac.uk/~vgg/software/via/via_demo.html | |
| 2. | Training your own Data set using Mask R-CNN for Detecting Multiple Classes | |



| | | |
|--|---|--|
| | https://medium.com/analytics-vidhya/training-your-own-data-set-using-mask-r-cnn-for-detecting-multiple-classes-3960ada85079 | |
| | | |



Table 3. Prerequisite

| Software Prerequisite No. | Description and Version | Note |
|---------------------------------|-------------------------|------|
| 1 | 5 images with persons | |
| | | |
| Hardware Prerequisite No. | Description and Version | |
| | None | |



1. Open the training website

1.1. Open the website

Website link: https://www.robots.ox.ac.uk/~vgg/software/via/via_demo.html

1.2. Delete the original two images

Click the “Remove” button to delete the images.

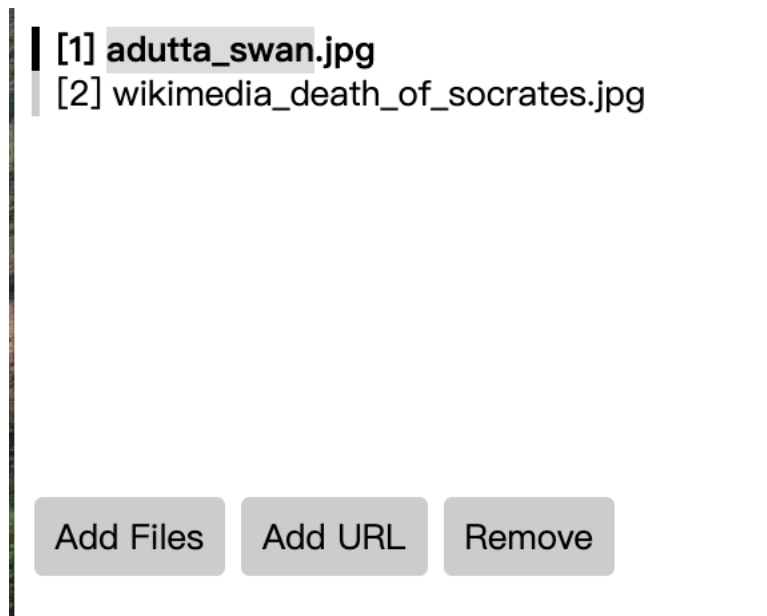


Figure 1. Original image

1.3 Add images that need to be trained

In the menu bar, choose Project → Add local files → choose the images

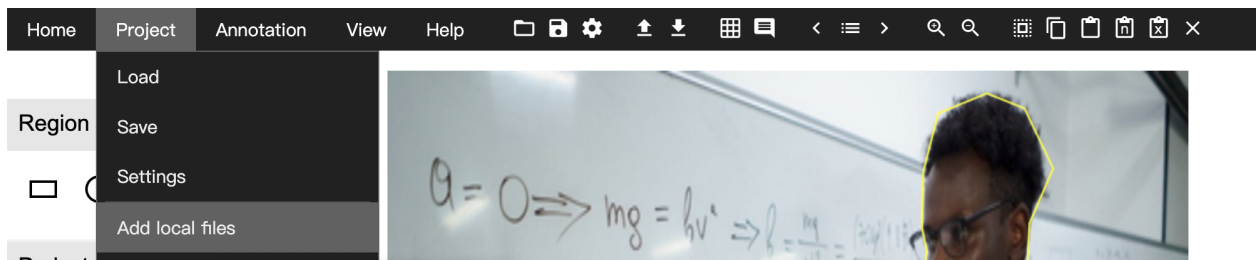


Figure 2. Menu bar



2. Set the name, super category and id of the images.

2.1 In the “Attributes”, choose “Region Attributes”

Attributes

[Region Attributes](#) [File Attributes](#)

+ -

person

▼

Name

person

Desc.

Type

dropdown

▼

| id | description | def. |
|------------------------------|-------------|----------------------------------|
| 1 | person | <input checked="" type="radio"/> |
| <div>Add new option id</div> | | |

[Toggle Annotation Editor](#)

Figure 3. Attributes

2.2 In the Attributes, choose the “name” as the Attributes

In “Type” part, change the Type as “dropdown”



The screenshot shows the 'Attributes' form with the 'Region Attributes' tab selected. The 'attribute name' field is empty. Below it, a dropdown menu is open, showing a list of types: 'text' (checked), 'checkbox', 'radio', 'image', and 'dropdown' (highlighted in blue). The 'Name' field contains 'name', 'Desc.' contains 'Name of the object', and 'Def.' contains 'not_defined'.

Figure 4. Change Type

2.3 In the “Name” part, change “name” to “person”.

After changing to “person”, hit “return” key

The screenshot shows the 'Attributes' form with the 'Region Attributes' tab selected. The 'attribute name' field is empty. Below it, a dropdown menu is open, showing a list of types: 'text' (checked), 'checkbox', 'radio', 'image', and 'dropdown' (highlighted in blue). The 'Name' field contains 'person', 'Desc.' contains 'Name of the object', and 'Def.' contains 'not_defined'.

Figure 5. Change Name

2.4 Choose the “person” category that just be changed.

The screenshot shows the 'Attributes' form with the 'Region Attributes' tab selected. The 'attribute name' field is empty. Below it, a dropdown menu is open, showing a list of types: 'type', 'image_quality', and 'person' (highlighted in blue). The 'Name' field contains 'person', 'Desc.' contains 'Name of the object', and 'Def.' contains 'not_defined'.



Figure 6. Change category



2.5 In the “id” part, set “id” as 1, and check in “def.”, then hit “return” key

Attributes

[Region Attributes](#) [File Attributes](#)

attribute name

Name

Desc.

Type

| id | description | def. |
|--|-------------|------|
| <input type="text" value="Add new option id"/> | | |

Figure 7. Set ID

2.6 Set description as “person” and check the def.

| id | description | def. |
|--|-------------------------------------|----------------------------------|
| <input type="text" value="1"/> | <input type="text" value="person"/> | <input checked="" type="radio"/> |
| <input type="text" value="Add new option id"/> | | |

Figure 8. Set description and def.

2.7 Delete the other two categories

a. In “Attributes” check how many categories there are.



Figure 9. Number of categories

b. Input the name of the categories which needs to be deleted and click “ – ”. Delete type and image_quality.

Figure 10. Delete Categories

3. Create the training image data

3.1 Choose one image, show the image in the operation view.

3.2 Choose the region shape to outline the person in the image

Choose the 4th region shape from left.

Figure 11. Region Shape



Outline the person in the image.

After outlining the person, hit “return” key to finish writing the outline.



Figure 12. Person

4. Export the Annotation

4.1 Save the Swift Package project.

In Menu bar, choose Annotation → Export Annotations(COCO format)

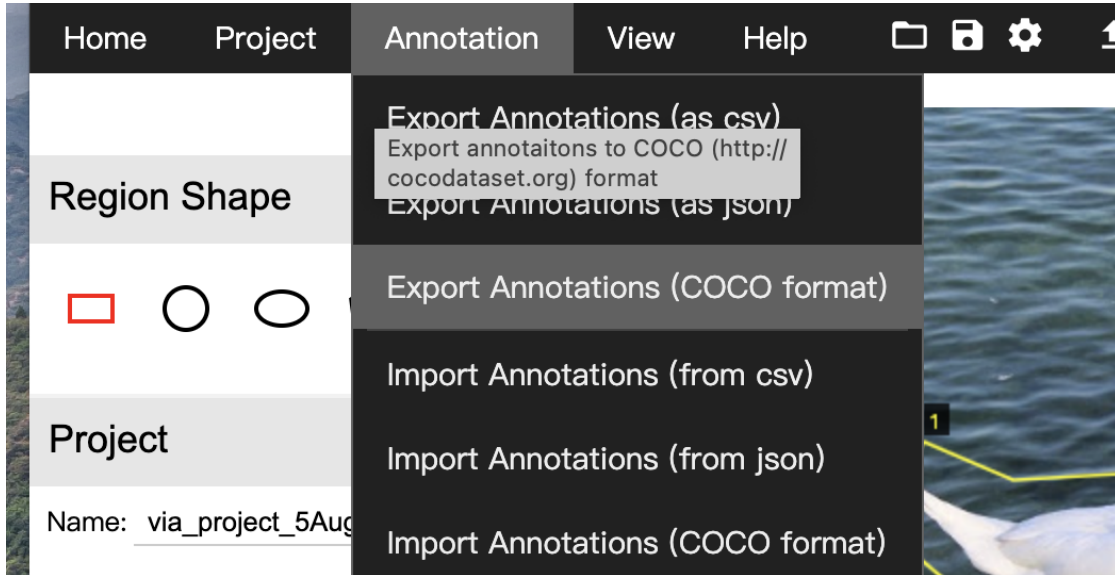


Figure 13. Export Annotations

(END)