# How to run the segmentation script

This file is destined to anyone that never ran a python script before, otherwise you can simple run segment\_from\_filev2.py in a terminal. It supposes that the computer already have anaconda installed. Otherwise one can simply download the latest version there: <https://www.anaconda.com/>

1. Search anaconda prompt in the search bar, open it

Graphical user interface, application

Description automatically generated

1. In the file explorer, find where the Scripts folder is, and copy the path at the top of the window.

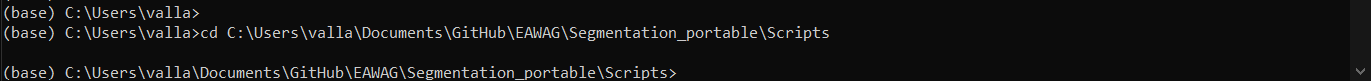
Note: Make sure that your path begins with “C:\”, move the “Segmentation\_portable” folder if it is not the case

A screenshot of a computer

Description automatically generated with medium confidence

1. Type cd in the anaconda prompt, and then paste the path.

Note: don’t forget the space after cd



1. Optional: If it is the first time the script is run on the computer, or if you get an error when trying to run it, consider running the command:

pip install -r requirements.txt

This will install all libraries necessary to run the script. Text

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1. Using the file explorer like in point 2, copy the path to the dataset. A folder called img needs to be there:

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Description automatically generated with medium confidence

1. In the anaconda prompt, begin to write the command: “python segment\_from\_filev2.py ”, and then paste the path of the images. You can then enter optional arguments: reset, mosaic, and mosaic=number. To learn what these do, refer to the second part of this tutorial

Text

Description automatically generated with low confidence

1. You’re done, the script will now segment all of your images.

## What does the script do:

The script will look for the folder called img, and will copy all its subfolders arborescence 3 times in the following 3 folders:

* img\_flat will contain the median image of the dataset, and can be used to add some other combined pictures like mosaics
* objects will contain pandas dataframe (one dataframe per image) containing information about the detected objects.
* ROI will contain png images of the objects that passed the selection criterion (currently using the size and sharpness of the objects to only save useful ones)
  + Before running the script:

A screenshot of a computer

Description automatically generated

* After running it:

A screenshot of a computer

Description automatically generated with medium confidence

If the reset keyword is given in argument (at step 5), all 3 of img\_flat, objects and ROI will be deleted and recomputed from scratch. Otherwise, it will only compute the ones where ROI does not exist.

If the mosaic keyword is given, it will build an ensemble image of size 3000 by 3000 for each acquisition, using the biggest ROI in priority if they are too many of them. This default size can be changed to any value by using mosaic=size. Note that you should **not** put any spaces around the = sign.