# Image Clicker app

## **About**

Designed to run in the background. It detects an image on screen that matches a target image, and clicks it.

Program was made for the purpose of clicking Youtube's "Skip Ads" -button, so one does not have to get up from the sofa.

## How to use

Get a screenshot of the button or image that you'd want to click automatically. Crop the image nicely, so there's least possible 'dynamic' content on the outskirts of the image. Save that image to the program's root folder with the name **Target.png**.



Image. 1. Target image in the root folder.

#### NOTES.

- Be cautious about setting the **Check Interval** -value too small. Every image click will relocate the mouse cursor to the target, which can make closing the program annoying if the loop is too fast.
- The program might not function as intended with multiple screen setups.
- The image detection looks for as close to exact matches as possible. Scaled (smaller / larger) images will not be seen as matches.

## Screenshots

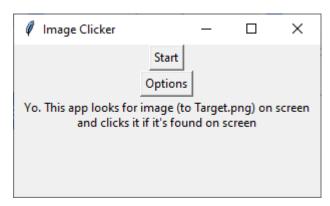


Image 2. Main view

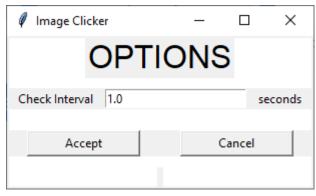


Image 3. Options view

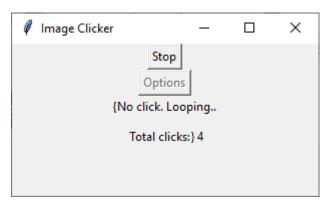


Image 4. Program running. The target image had been detected and clicked four times.

## Libraries and use

#### tkinter

- Program window generation

#### PIL

- ImageGrab used for screen capture

#### time

- Creating a delay with the **sleep()**-method (in the screen grab and detection loop)

#### threading

- The detection loop runs on a thread, so the tkinter's mainloop() won't get blocked from updating. By using a thread, the window can still execute button clicks during the detection loop, and the detection loop can be stopped by pushing a button in the program window.
- The **threading.Event** -class has an internal thread-safe boolean flag, which here is used for stopping the detection loop.

#### numpy

 numpy.array used for converting the PIL image into array, which cv2 uses when converting RGB to BGR

### cv2 (OpenCV)

Image reading and template matching (image detection)

#### **PyAutoGui**

Simulating the mouse left click

#### configparser

- Saving the options to **config.ini** -file

os

- Creating the default .ini -file using os.path if the file is not found