Image Matcher

Image Matcher has developed to satisfy matching images in different scale. Basically in dataset, one wide field (wf) image and several zoomed images. By using feature extraction and matching algorithim tries to find perfect location for zoomed images on wide field image.

Usage

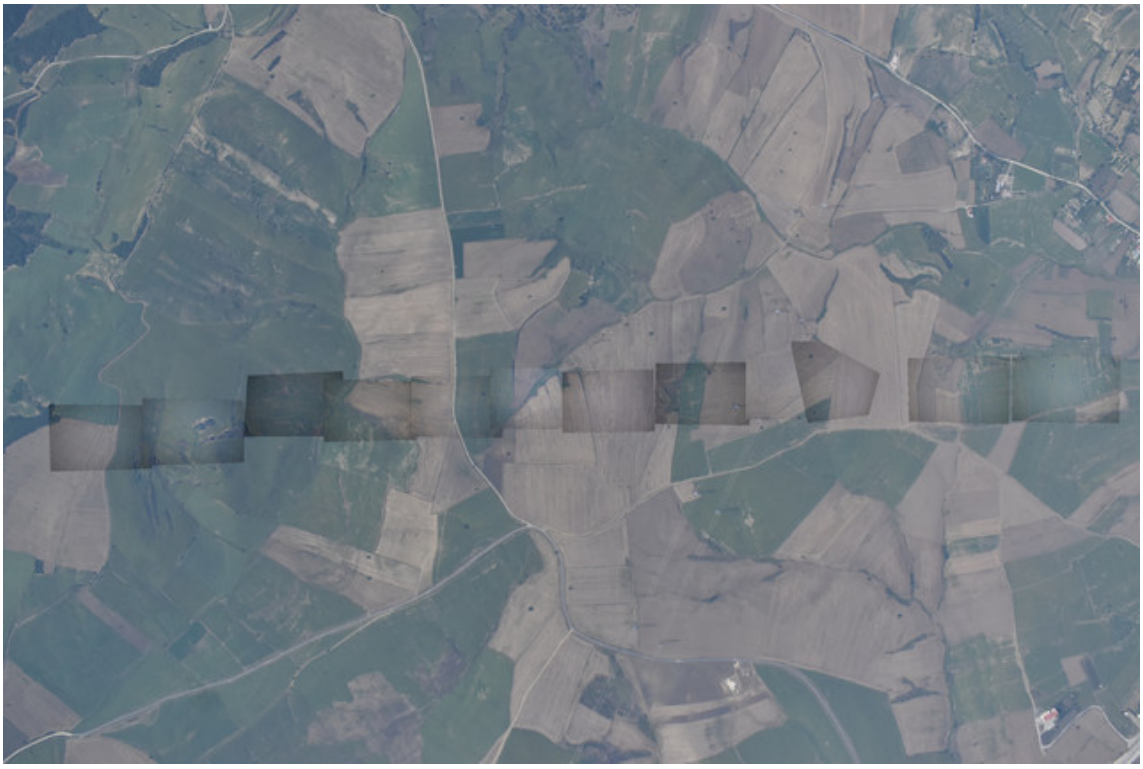
```
python3 image_matcher.py --input1 {input_file_name} --input2 {reference_file_name}
```

Input2 is optional. It has set as wide field image of dataset by default in script.

```
python3 image_matcher.py --input1 mf00.JPG
```

And if you set input1 as all you can get all image located on wide field image.

```
python3 image_matcher.py --input1 all --input2 {reference_file_name}
```



Results

Due to the high size of images figures can not be fitted to screen without resizing. You may dont like to resized images resolution. Results are also saved to "Results" folder. And aligned images are also saved to "Aligned" folder. Just in "all" case aligned images are not saved seperately.

Comments

3 of the images needed to set specific parameters such as feature size and threshold parameter to get good solution. Others was quiter fine for constants parameters. In order to reduce computation time specific parameters are used to only for three images. High feature size may increase computation time and it is not necessary for all images so parameters are adjusted as explained above. In further work search features size, threshold parameter,spaces and center coordinates may be given as parameter to use developed script for general purpose.