



FACULTY OF ENGINEERING
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Systems and biomedical
Engineering Department

Computer Vision Task 3 Report

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● Contents:

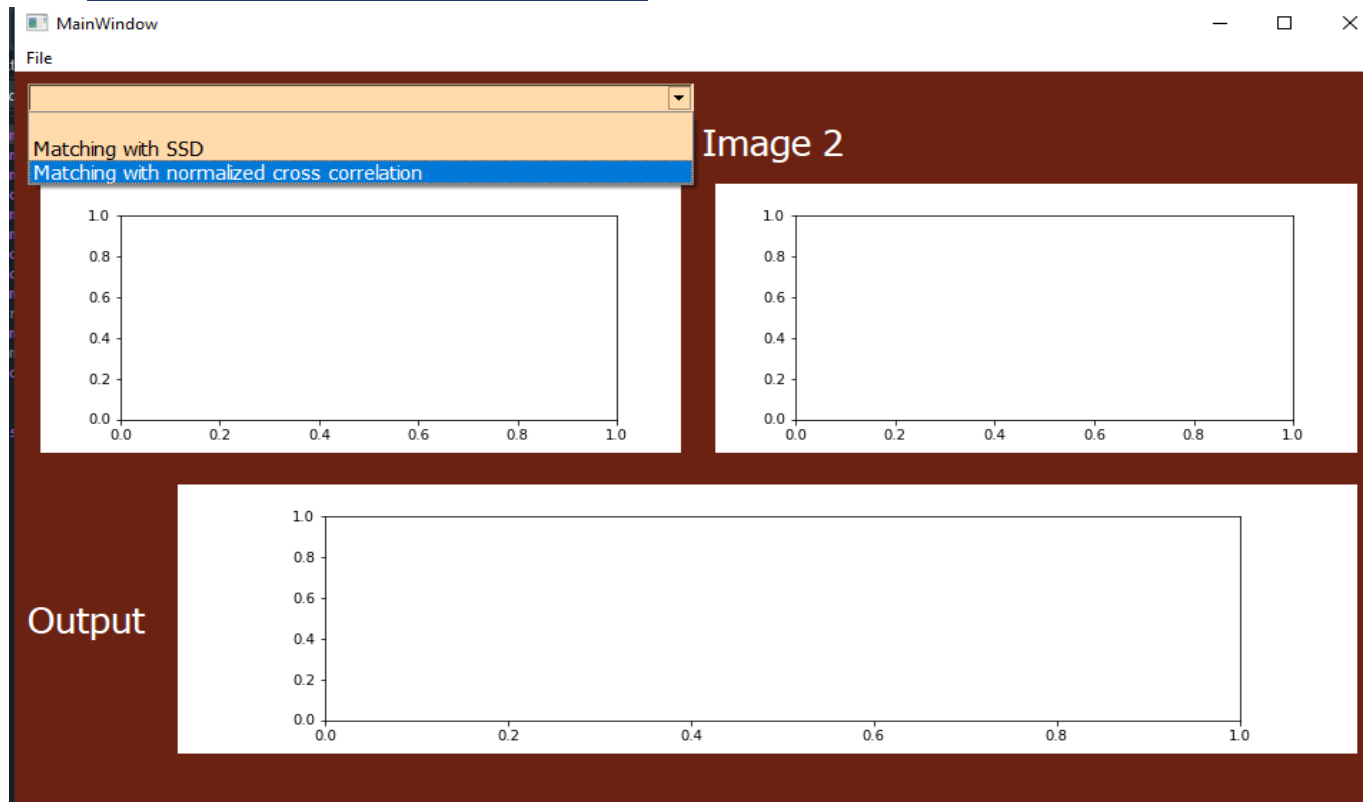
1- How to use the GUI.

2- Computation time.

3- SSD result.

4- NCC result.

1. How to use the GUI



- Click on File from the menu bar, you will see two options, Load img1, Load img2.
 - Click on Load img1,2 to open images in the image area.
- Click on the combo box and pick any of the task requirements:
 1. Matching with SSD.
 2. Matching with normalized cross correlation.

2.Computation time in second

	Image 1	Image 2
Harris corner detection	7.332798000000002	10.044935899999999
SIFT descriptors	6.825931799999999	14.3985451
Matching with sum of square distances	1.9363526000000064	
Matching with normalized cross correlation	2.1062118999999991	

Image1 size = 309 x 206 PX

Image2 size = 365 x 243 PX

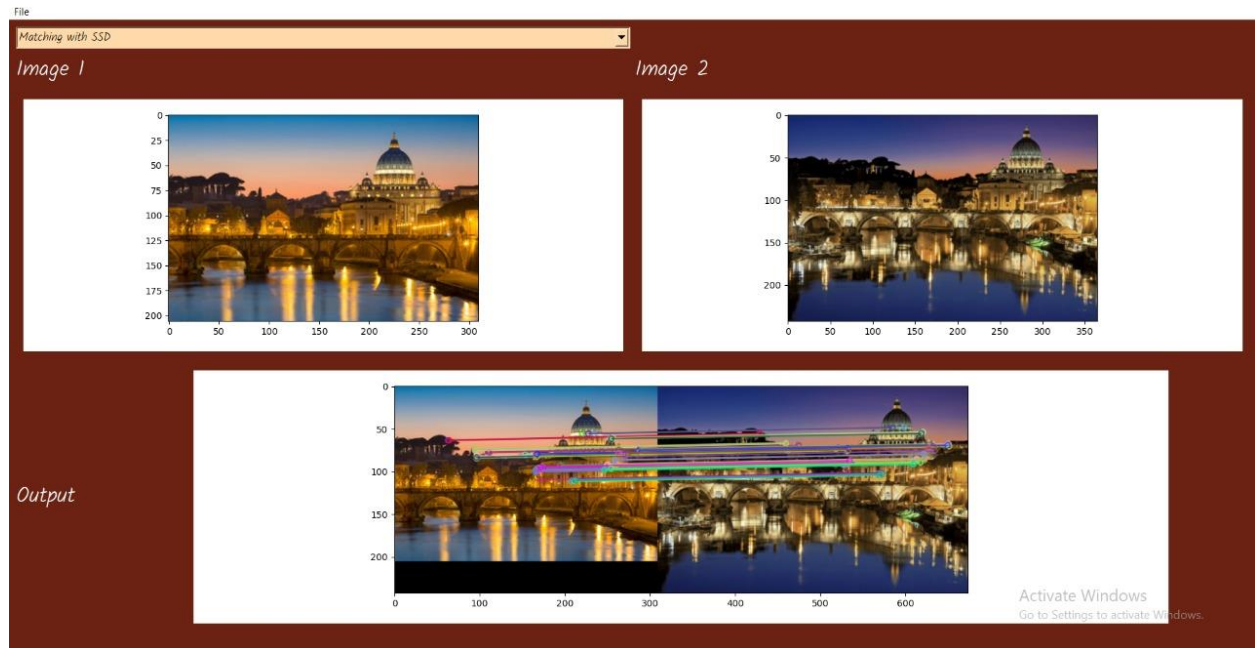
Machine specifications (Laptop used):

- Processor: Intel CORE i5 7th Gen
- RAM size = 12 GB

```
Anaconda Prompt - python main.py
(base) E:\4th year\2nd term\CV\Task3\Codes>cd E:\4th year\2nd term\CV\Task3\Codes
(base) E:\4th year\2nd term\CV\Task3\Codes>python main.py
Harris_time_img1: 7.332798000000002
Harris_time_img2: 9.964750099999996
descriptors_img1: 6.727261899999995
descriptors_img2: 14.212537400000002
MCC_time: 2.1062118999999991
```

```
Anaconda Prompt - python main.py
(base) E:\4th year\2nd term\CV\Task3\Codes>python main.py
Harris_time_img1: 7.1684777
Harris_time_img2: 10.044935899999999
descriptors_img1: 6.825931799999999
descriptors_img2: 14.3985451
SSD_time: 1.9363526000000064
```

3. SSD result



4. NCC result

