

Computer vision course

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Lab 6 - Image matching

Task 1

Write a program that opens two images (filenames provided as command-line arguments - files provided on moodle) and checks the content by: i) evaluating features on the images; ii) matching features of the two images. The matching strategy is at your choice.

Based on the feature match the program shall state whether:

- the two images have similar content;
- the two images have similar content processed by some strong transformation (e.g., the content is strongly rotated, or framed under a very different perspective);
- the two images have different content.

Test your approach considering different features available in OpenCV: check on the documentation, list all the available features, select 2-3 features you consider suitable for the task. Test on different image couples - start from the images provided, but optionally you can test on other images taken from the internet or shot by yourself.

Reference

Images are taken from:

<https://www.robots.ox.ac.uk/~vgg/practicals/instance-recognition/index.html>

OpenCV tutorial:

https://docs.opencv.org/4.x/dc/dc3/tutorial_py_matcher.html