

## Computer Vision (2016/2017)

### Lecture 10

1. Develop a program to perform traffic sign detection. You can consider the existence of a database with images of several traffic signs (templates) and your program has to find the position of the signs in the input image (or video) if they appear there.

As starting point, explore the OpenCv tutorial about template matching. In your implementation, explore the several matching methods available in OpenCV.

2. Develop a face detector and a face recognition program. You should consider the existence of a database with images containing the reference faces and your program has to determine the one that is most similar to the one that is under analysis.

Explore the OpenCv tutorial about the use of cascade classifiers, as well as the other tutorials regarding face detection and face recognition <sup>1</sup>

3. Write a report about the experiences done in this class. It should contain an example of the images displayed in each exercise, as well your comments about them.

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<sup>1</sup>[http://docs.opencv.org/2.4/modules/contrib/doc/facerec/facerec\\_tutorial.html](http://docs.opencv.org/2.4/modules/contrib/doc/facerec/facerec_tutorial.html)