

## 2812ICT Lab week 11

### Application: Face detection using local features

This week we will try to perform face detection using the LBP cascade classifier in OpenCV.

The code is provided to you as a Jupyter notebook: LBP\_face.ipynb

While you experiment with the code, read also the following paper:  
Jo-FaceDetectionUsingLBPfeatures.pdf

Compare the LBP cascades with another popular face detector using the Haar cascades:  
[https://docs.opencv.org/3.3.0/d7/d8b/tutorial\\_py\\_face\\_detection.html](https://docs.opencv.org/3.3.0/d7/d8b/tutorial_py_face_detection.html)

(Optional) Extend your code so that you could use the webcam on your laptop to grab images and detect faces.

Other activity: Work on your programming assignment which is due at end of week 11.

### What to hand in:

Prepare a report describing your work and experimental results obtained. Explain what the code actually does in your report.

Use the link provided on L@G to hand in your work by the end of the week. Programming work should be done in Python, using Jupyter notebook, for code, results, and documentation. If you are using Jupyter notebook, submit your results based on an html file.