

Computer Vision – Proseminar (911.909)

Exercise sheet D (Nov. 29, 2016)

Hand-in by **Dec. 06, 2016****Scene Recongition****Exercise 1.**

10 P.

The task is to adjust and evaluate the scene recognition pipeline of the previous exercise (Ex. sheet C).

Modify your pipeline to use Gaussian mixture models (GMMs) to estimate the probability density of the SIFT features (instead of k-means clustering as before) and build a Fisher vector representation (of each image) on top of that.

Use the same training/testing splits as before and report the scene classification results using a linear SVM for instance.

Hand-in a compressed file containing all the MATLAB source files that you wrote for that exercise. Add a couple of comments to the main file reporting the results.