

SGN-12007 Introduction to Image and Video Processing

EXERCISE 12

07.12.2017-08.12.2017

The tasks should be completed and presented to TA during the lab session. Questions about exercises should be addressed to the TA personally or via email: (firstname.surname@tut.fi).

1) Inter-frame motion estimation

The file *MotionEstimation.m* contains the template of the function to calculate the block-wise motion vectors between two RGB images. The algorithm used is Exhaustive Block Matching (EBMA, refer to Lecture 12 for details). Familiarize yourself with the given code and its parameters, then finish the function by adding your own code where indicated. Write comments for your additions.

Verify your implementation on the provided images *im1.png* and *im2.png*. Try different block sizes and search areas. Is there a difference in the motion maps? Explain why/why not.