

**BIM472 IMAGE PROCESSING
HOMEWORK #2**

- 1) Develop a program performing histogram equalization on the input (grayscale) image:
 - a. First, write your own algorithm for histogram equalization.
 - b. Then, use built-in histogram equalization function.
 - c. Finally, display outputs of both your and built-in function.

- 2) Develop a program applying NxN averaging filter to the input (grayscale) image:
 - a. First, write your own algorithm for filtering. Size of the output image should be equal to size of the input image.
 - b. Then, use built-in filtering function for filtering.
 - c. Finally, display outputs of both your and built-in function.

Notes:

- Test your code for different images.
- Make sure that appropriate comments are added in your code and the output is displayed in each case.
- Matlab or OpenCV can be used.
- Each group (consisting of max. 3 students) should make single submission. You can not change your groups during the semester.
- Indicate IDs and names of the group members in the submission.
- Submit your file via ESTUOYS by the deadline.