Middle East Technical University Department of Computer Engineering

CENG 466

Fundamentals of Image Processing

Spring 2017-2018

Assignment 2

Due date: May 9 2018, Wednesday, 23:55

In the scope of this homework you will implement an imagefilter, and report your experiments with that particular filter.

Filters - Implementation

Choose one (or more) of the following filters and **implement** it.

1. Order filters (min/max, median)
2. Morphological filters (erosion, dilation)
3. Bilateral filter

You **may** use implementations available online, provided you cite properly and explain the code in your terms. Note that if you are able to implement the code without consulting the Internet, it is in your best interest to do so.

Report

In your reports you are expected to reflect on your work for this homework. Some examples:

- results of your filter applied on an image with different parameters,
- subtleties in the implementation of your filter,
- performance of your filter,
- limitations of your filter,
- comparison of your filter with other filters,
- dead ends of your experiments, etc.

You may also report work in your research area that relates to the use of your filter, by properly citing your sources.

Regulations

1. Your report length should be between 350 words and 600 words, avoiding repetitive statements and excluding your code.
2. **Late Submission:** E-mail your submission and reasons to the TA of the course. Your late submission **may or may not** be accepted depending on your reasons.
3. **Cheating:** You are free to obtain information from any source provided you cite properly. However, if what you are doing feels like cheating, it is probably better if you stopped doing it.
4. **Updates & Announces:** Please follow **odtuclass** for discussions and possible updates.

Submission

Submissions will be done via **odtuclass**.
Submit a single compressed file (could be ".tar.gz", ".rar", etc.) that includes a ".pdf" file along with your code (and a Makefile, if needed).