ELE 492: Image Processing
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HW-1

Data: Download your own images from the web. Convert them to grayscale if need be.
Submission Details: Upload your report as a single .pdf file to the system. Include your code in the appendix of the report. Name it as HW1_yourID_yourName.pdf.
Late Penalty: If you submit late, you will lose 20pts for each day.
** All the code should be written in Python unless stated otherwise.

1- **At the top of the HW, please sign this pledge**:

> I have not received or given any aid in this homework. All the work presented below is my own work. (Name, lastname, signature).

In this homework, you will use the **Scikit-image library** for basic image operations and compare them to your **self-written functions**.

2- Take 10 images with a camera (camera and objects should be fixed) and display their average. By investigating each image (pixel by pixel if need be), comment on the results.
3- Write your own code for image negative and display the results.
4- Write your own code for Gamma correction and display the results.
5- Use the Scikit-image library and implement the Gamma correction. Compare your results to Step 3.

#As the parameter "c" gets smaller the image becames darker

6- Implement log transform and comment on the effect of the parameters.
7- Downscale an image by 2, then upscale it by 4. Show the results and comment on your findings. (Hint: You can look at resize, rescale.)

Finally, please enjoy the journey and let it show in your work. Good luck!

Dr. Seniha Esen Yüksel