

Project on Image Processing using MATLAB

Task

Using image processing using MATLAB and the Image Processing Toolbox, retrieve a stored image and do a filtering of signal.

The program must have the following features (at the minimum):

1. Retrieval of stored image signal (Read, Write, and Display an Image)
2. User to define the
 - a. Filter characteristics of the image such as Binary Image, Image type, Indexed image, Intensity Image, Multiframe image , RGB (red, green, and blue) image
 - b. Type of filter
 - c. Morphological Opening to Estimate the Background
 - d. Subtraction of the Background Image from the Original Image
 - e. Image Contrast Adjustment
 - f. Threshold of the Image
3. Should have ability to display the original and filter characteristics of the images as required
4. Add the Full Name, Course, Section, Quarterterm/Year on top of the GUI.
5. You may add any GUI tool that you wish to add. Explore on how to use those GUI tools.

Project Requirements

1. Final Documentations
 - a. Title page
 - b. Introduction of the Project
 - c. Acknowledgement
 - d. Program Description
 - e. Scope and Limitations
 - f. Screen capture of image file
 - g. ALL m-files used in the project
 - h. Three (3) sample output
 - i. References
 - j. Appendices
2. CD Copy of the ffg: video (min of 15min of coding and final testing), all m-files, all fig-files and soft copy of the final documentation above.
3. Oral Presentation/ Defense for the Design Implementation.