

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 (FIR only)
 - 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 by user
4. 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 (if applicable)
2. Use only CD/DVD-R Copy. Included are all m-files, all fig-files, soft copy of the final documentation above and minimum of 10mins video. The video during coding and testing must show you and groupmate face.
3. Oral Presentation/ Defense for the Design Implementation.