Galgotias College of Engineering and Technology
1, Knowledge Park-II, Greater Noida, 201306(Uttar Pradesh)

Department: Electronics and Communication Engineering

DIGITAL IMAGE PROCESSING LAB

(KEC-751A)

LIST OF EXPERIMENTS

(As per AKTU Syllabus)

1. Introduction to MATLAB Image Processing Toolbox.

2. Write a MATLAB program to learn the basic image processing operations.

3. Write a MATLAB program for geometric transformation.

4. Write a MATLAB program for image enhancement using Histogram equalization.

5. Write a MATLAB program to perform smoothing or averaging filters in the spatial domain.

6. Write a MATLAB program to perform smoothing or averaging filters in the frequency domain.

7. Write a MATLAB program for image restoration.

8. Write a MATLAB program for sharpening the image using a gradient mask.

9. Write a MATLAB program for performing morphological operations on the image.

10. Write a MATLAB program to fill the region of interest of the image.

11. Write a MATLAB program for edge detection of an image.

12. Write a MATLAB program for DCT-based image compression.

13. Write a MATLAB program to remove high-frequency components in the image using a frequency domain approach

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Software Required: MATLAB

For smooth conduction of the same lab, we have the following Equipment:

1. Computer System: - We have 40 latest computer systems with high configuration in the laboratory for conducting the lab. All the computer system is installed with the latest version of MATLAB software. We provide one computer system to one student to complete his/her experiment.
2. Software: - We have the latest version of MATLAB software installed in all the systems and updating from time to time as per requirement.