DEPARTMENT OF

COMPUTER SCIENCE AND ENGINEERING

(AIML633P)

Digital Image Processing

B. Tech – Computer Science and Engineering (AIML)

School of Engineering and Technology,

CHRIST (Deemed to be University),

Kumbalagodu, Bengaluru-560 074

2024-25

Certificate

This is to certify that ***George Bobby, 2262067*** *has successfully completed the record work for (AIML633P -Digital Image Processing) in partial fulfillment for the award of Bachelor of Technology in Computer Science and Engineering (AIML) during the year 2024-2025.*

HEAD OF THE DEPARTMENT **FACULTY- IN CHARGE**

EXAMINER 1:

EXAMINER 2:

Name : GEORGE BOBBY

Register No. : 2262067

Examination Center : SoET, CHRIST (Deemed to be University)

Date of Examination :

List of Experiments

Sl. No	Name of the Experiment	Date	Page No.	Marks Awarded	Faculty Signature
1	Implement Basic Arithmetic operations, Logical Operators, Relational Operators on gray-scale images using MATLAB.				
2.	Read a grayscale image and perform the following transformation and display the output images with proper captions. Resize (Scaling) ii) Rotate iii) Translation				
3.	Perform the following operations on Grayscale Image i)Negative ii) Binary iii) Smoothing iv) Sharpening				
4.	Apply histogram and Histogram equalization for the given image				
5.	Apply low-pass filter for a grayscale image in the frequency domain for Ideal, Gaussian & Butterworth noises and display the output image respectively.				
6.	Apply high-pass filter for a grayscale image in the frequency domain for Ideal, Gaussian & Butterworth noises and display the output image respectively				
7.	Read an image and apply Sobel and Prewitt filters to detect horizontal, vertical, left diagonal, right diagonal lines and display the output image respectively				
8.	Read coins image and find the following region properties i) Area ii) Centroid iii) Bounding Boxes iv) Major & Minor Axis Length v) Count the no of coins in the given image				
9.	Read a Gray scale image and apply morphological opening & Closing method with a suitable structuring element. Show the output of the opening & Closing operations				
10.	Implement CNN model for the classification of digits				