

B.Tech, CSE-AI (2022-2026)
First Semester 2022-23

Problem Solving & C Programming

Project Topics

1. Develop and implement a C Program to rotate the input image by 180 degrees. (Flipping-mirror image).
2. Develop and implement a C Program to generate a synthetic image containing four concentric squares with four different pixel intensity values
3. Develop and implement a C Program to find the histogram of the input image.
4. Develop and implement a C Program to perform edge detection on the input image.
5. Develop and implement a C Program to convert an RGB image to a grayscale image without using the inbuild function.
6. Develop and implement a C Program to find the negative image of the input image.
7. Develop and implement a C Program to generate a pure black-and-white image from the input image without using the inbuild function.
8. Develop and implement a C Program for image thresholding.
9. Develop and implement a C Program to resize the input image.
10. Develop and implement a C Program for the concatenation of two images.
11. Develop and implement a C Program to input an RGB image, and produce another image by inter changing the color channels as users wish.
12. Develop and implement a C Program to apply the median filter on the image input.
13. Develop and implement a C Program to generate separate Red, Green, and Blue channel images for the input RGB image.
14. Develop and implement a C Program to find the smooth image after applying an average filter on an image.
15. Develop and implement a C Program for contrast enhancement of the input image.
16. Develop and implement a C Program to find the similarity between two input images using the correlation coefficient.
17. Develop and implement a C Program to perform gray level slicing operation on input image.