

Assignment 2

Due Dec 11, 2022

Topics: Image Filtering, Image Difference.

Programming Language: Python/Java/C++

In this assignment, you are required to write a program to design, apply, and evaluate applying a filter to an image.

Your program should display the filter in 2D and the resulting matrix, apply the filter to an image, I, and display the image I, the filtered image, R, and the difference between I and R.

You are required to handle two kinds of filters: smoothing, and edge detection. Your program should present a default value for each one, and then let the user update these values and re-display the three images. The size of the filter may range from 3×3 to 9×9 .

Good luck