Computer Vision Project 2 Answer Example

Q1. How can we improve the edge detection performance?

Explain it by using the parameters given in the provide program, Harris Corner Detector.

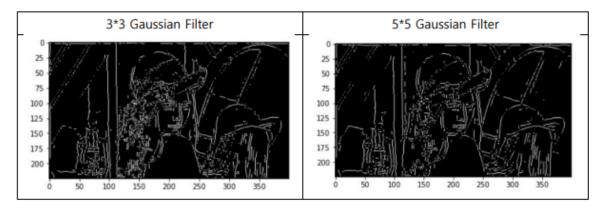
A1 : Change a sigma value. It is a parameter for smoothing. If it has small value, performance will be low, but if too high, detector can be found lots of corner points

A2. : Set a low k value in create_corner_response_matrix. If it would be higher, Corner response will be decrease, and detector performance will be poor.

Q2. How can we improve the edge detection performance? Explain it by using the parameters given in the provided program, 'OpenCV-Canny-Edge-Detection.'

A1. Improve a size of Gaussian kernel for bluring an image. And Sensitivity of Detection will become low.

A2. For an experimental point, change threshold value for weak edge and strong edge. Next, check your detector performance.



High upper threshold and low lower threshold can improve the results. Setting the lower threshold too high will result noisy edges. Otherwise, setting the higher threshold too low will result fake edges.