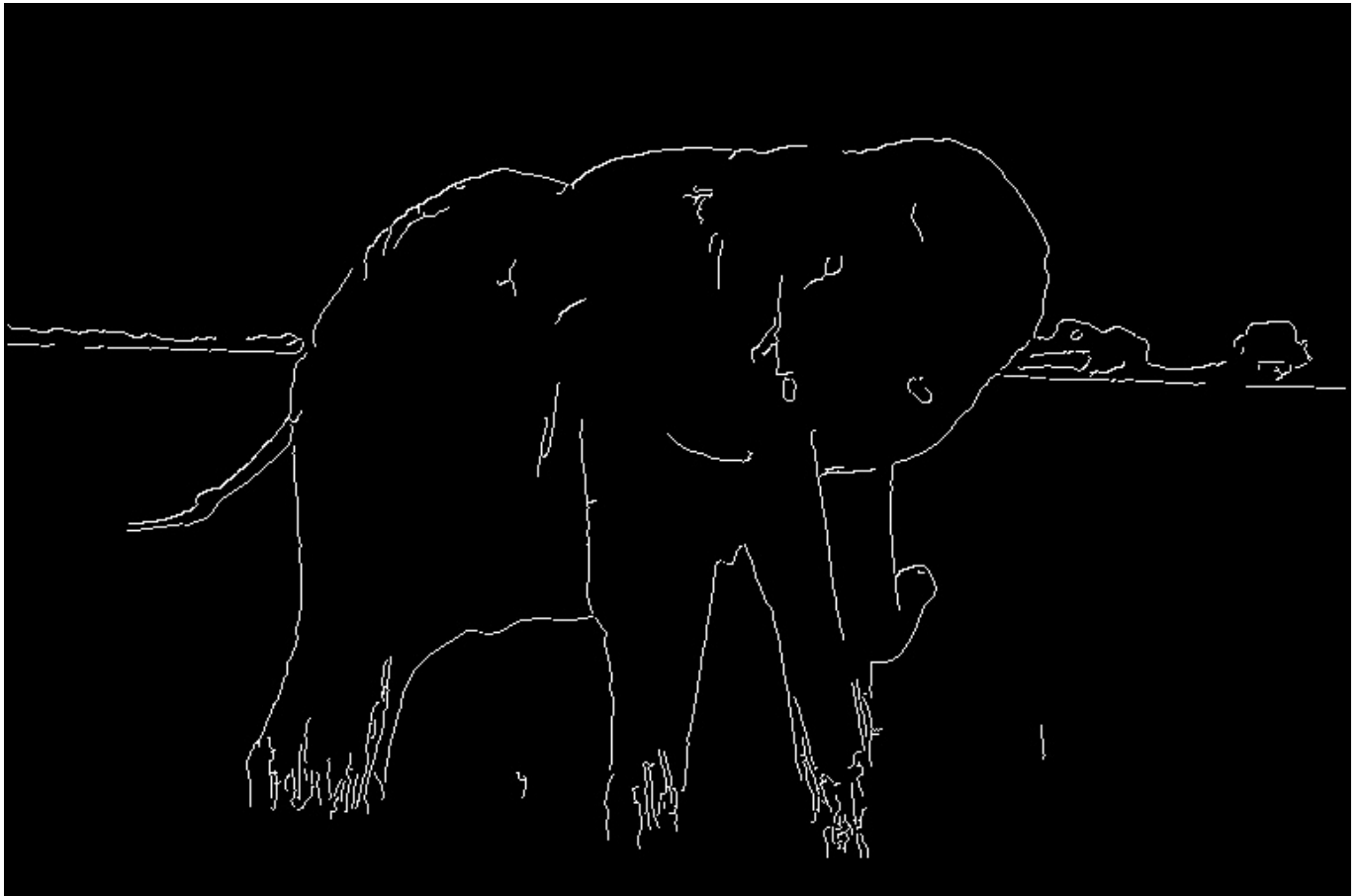
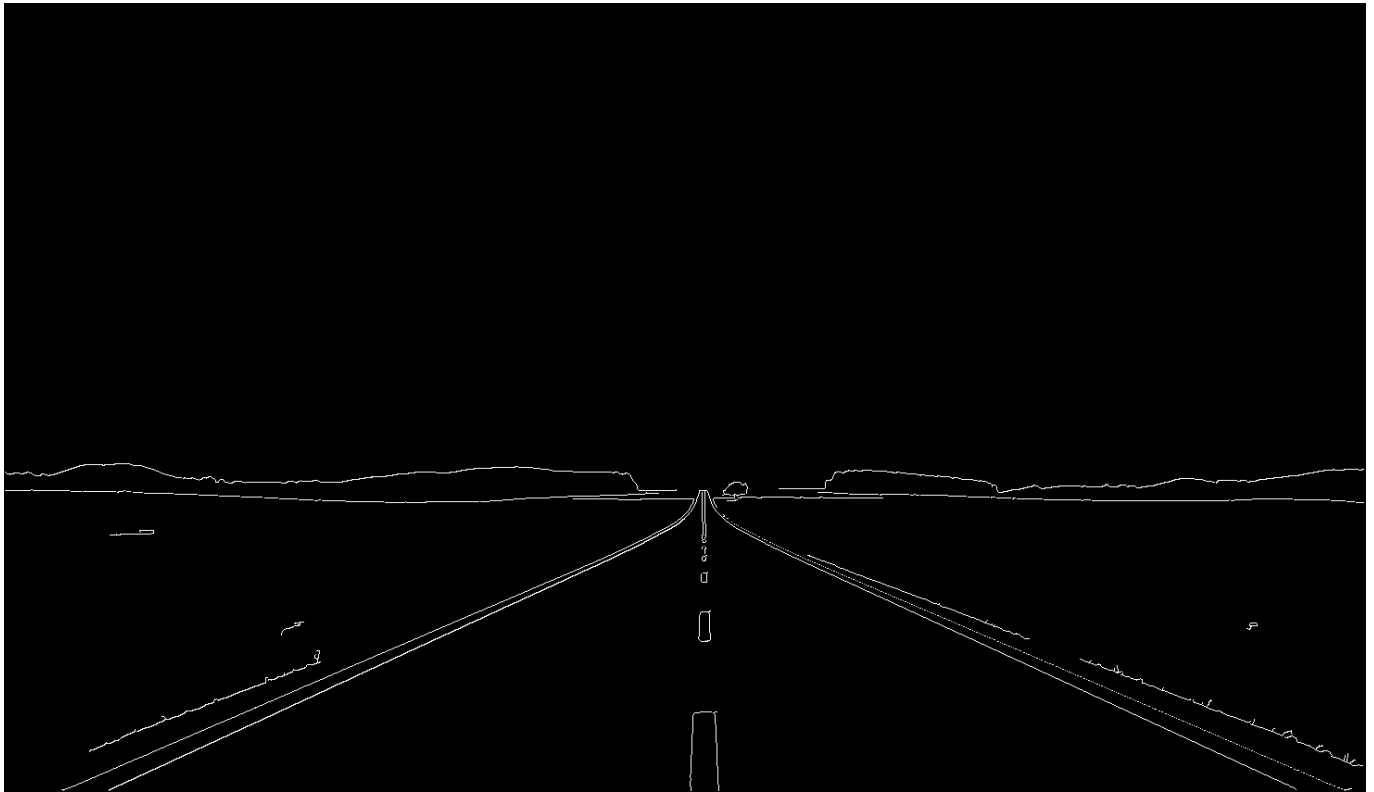


Report 110590018 劉承翰

Result





Step

Step 1:

Convert to gray scale

Step 2:

Apply Gaussian filter with $\sigma=1.1$ and filter size=5*5

Step 3:

Calculate the gradient and angle for each pixel

Step 4:

Round the angles to 0, 45, 90, or 135 degrees

Step 5:

Suppress non-maximum values for angles 0, 45, 90, and 135 degrees

Step 6:

Use double thresholding with 50 and 140 to find weak edges and strong edges

Step 7:

Use DFS to connect weak edges to nearby strong edges

Step 8:

Obtain the final edges