

# EdgeDetectionAnalysis

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## 1 Edge Detection

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[21]: import numpy as np
import cv2 as cv
from matplotlib import pyplot as plt
from matplotlib.pyplot import figure
import os

folder = 'sample'
for filename in os.listdir(folder):
    figure(figsize=(8, 6), dpi=160)
    img_original = cv.imread(folder+'/'+filename)
    img_original = cv.cvtColor(img_original, cv.COLOR_BGR2RGB)
    img_canny = cv.Canny(img_original, 100, 200)
    img_Dexined_avg = cv.imread('results/DexiNed/avg/'+filename[: -4] + '.png')
    img_Dexined_fused = cv.imread('results/DexiNed/fused/'+filename[: -4] + '.png')
    img_RCF = cv.imread('results/RCF/'+filename[: -4] + '.png')
    plt.subplot(151), plt.imshow(img_original)
    plt.title('Original'), plt.xticks([]), plt.yticks([])
    plt.subplot(152), plt.imshow(255 - img_canny, cmap = 'gray')
    plt.title('Canny'), plt.xticks([]), plt.yticks([])
    plt.subplot(153), plt.imshow(img_Dexined_avg, cmap = 'gray')
    plt.title('DexiNed(avg)'), plt.xticks([]), plt.yticks([])
    plt.subplot(154), plt.imshow(img_Dexined_fused, cmap = 'gray')
    plt.title('DexiNed(fused)'), plt.xticks([]), plt.yticks([])
    plt.subplot(155), plt.imshow(255 - img_RCF, cmap = 'gray')
    plt.title('RCF'), plt.xticks([]), plt.yticks([])
    plt.show()
    plt.close()
```







