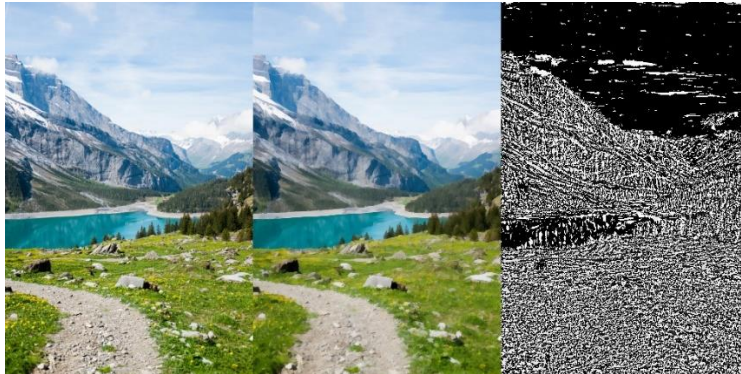


There are 6 sample images in total. (sample1.jpg – sample6.jpg)

1. Utilize default setting to each image (kernel size:3, iteration: 1)

Result image name: samplex_smooth.jpg

Ex: sample1_smooth.jpg

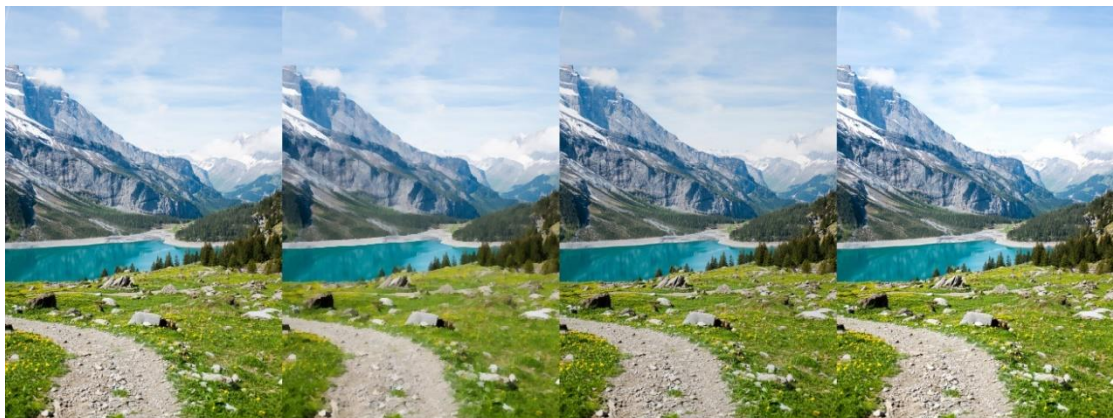


Left to right: original image(I), smoothed image(M), detail layer ($D = I - M$ on Y channel)

2. Image Enhancement: sample1 sample6

Method: Unsharp Masking --- combination of all-pass and low-pass filters

Ex: sample1_enhancement095_105.jpg



Left to right: original image, smoothed image, enhancement image1, enhancement image2

3. Noise Removal: sample2 sample3

Apply Gaussian noise and Salt and pepper noise to each image

Ex: sample2_gauss_remove.jpg



Left to right: noisy image, 1st iteration smoothing, 2nd iteration smoothing

Ex: sample2_sp_remove.jpg



Left to right: noisy image, 1st iteration smoothing, 2nd iteration smoothing

It's more difficult to remove salt and pepper noise.

4. Multiple Iterations: sample4 sample5

Ex: sample4_3iterations.jpg



From left to right, top to bottom: original(I), 1st iteration smoothing(M1), 2nd iteration smoothing(M2), 3rd iteration smoothing(M3), none, 1st detail layer(D1 = I - M1), 2nd detail layer(D2 = M1 - M2), 3rd detail layer(D3 = M2 - M3)