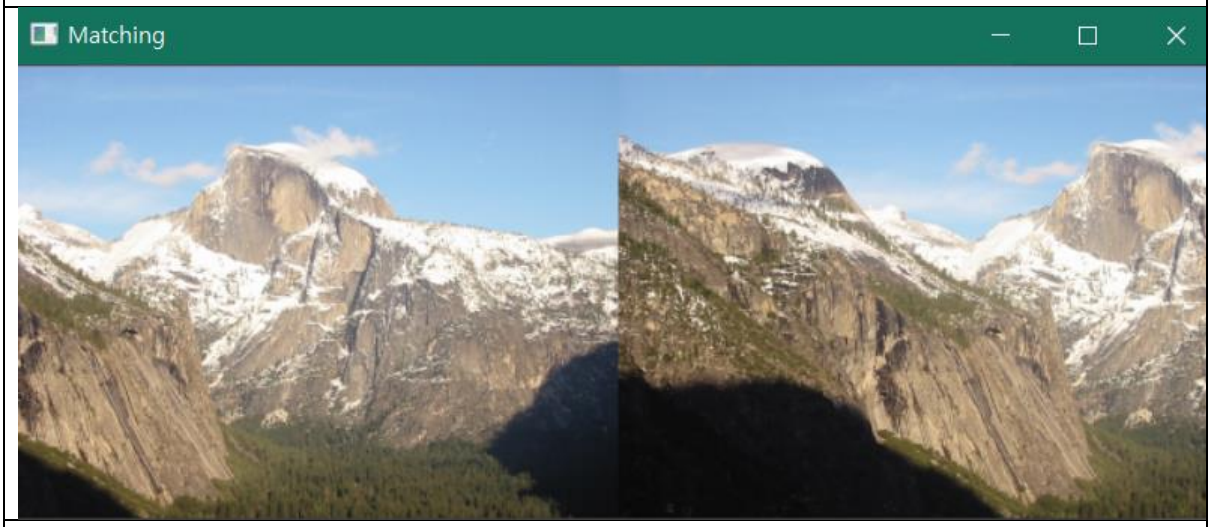
Open Software Project

Assignment 08 Technical Report

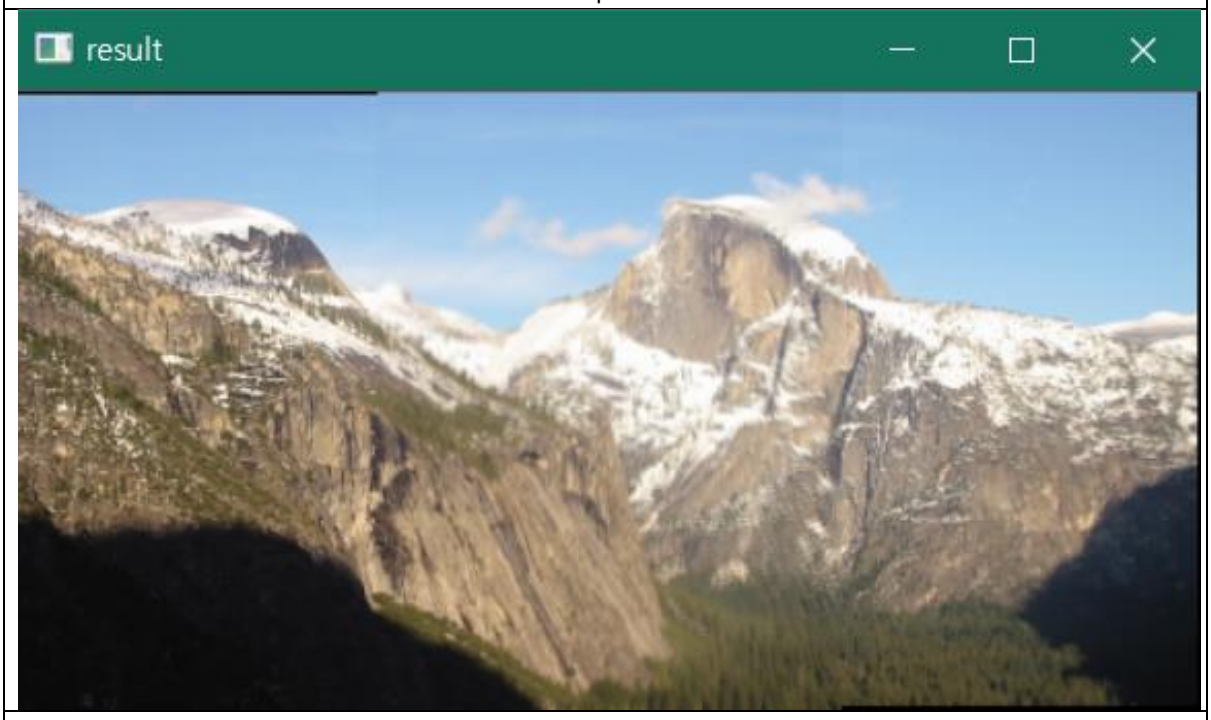
1976235 오진솔

1. SIFT

Case 1) Mx = b



input



output

2. Hough Transform

<pseudo code>

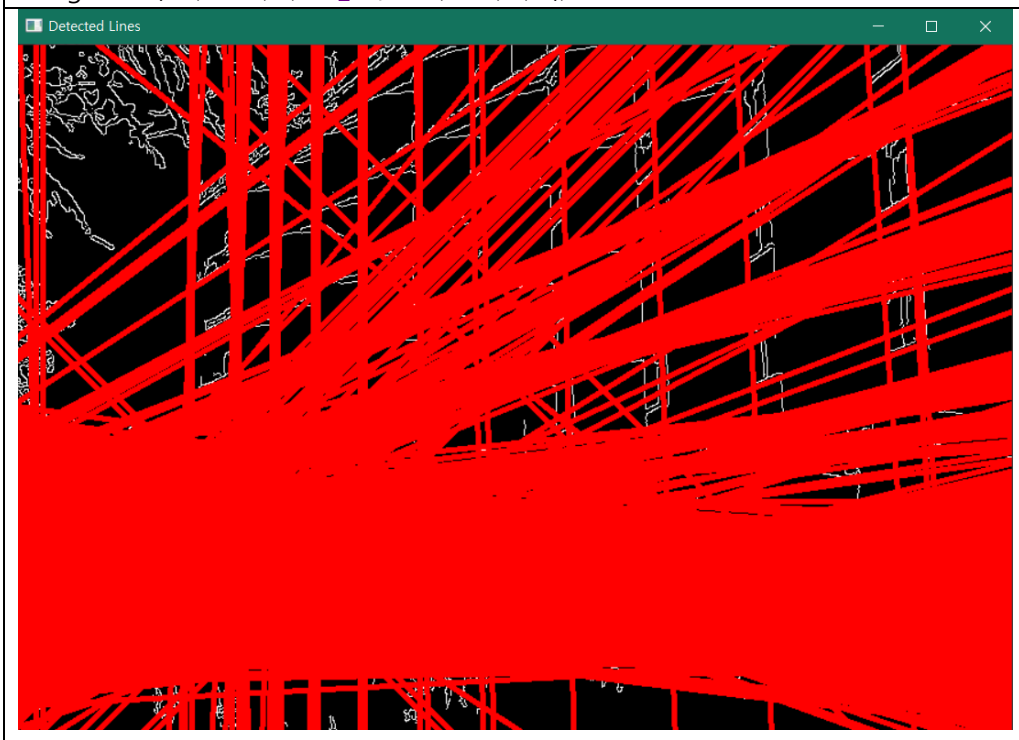
```
float r_array[360+1][image_size]

for( every pixels){
    for(theta = 1~360)
        r = x cos(theta) + y sin(theta)
        if (r not in r_array[0]) add r in r_array[0]
        r_array[theta][where value = r] ++;

for (r_array[i][j])
    if (value > threshold)
        lines.push(i, r_array[0][j]))   // push (theta, r) to lines
```

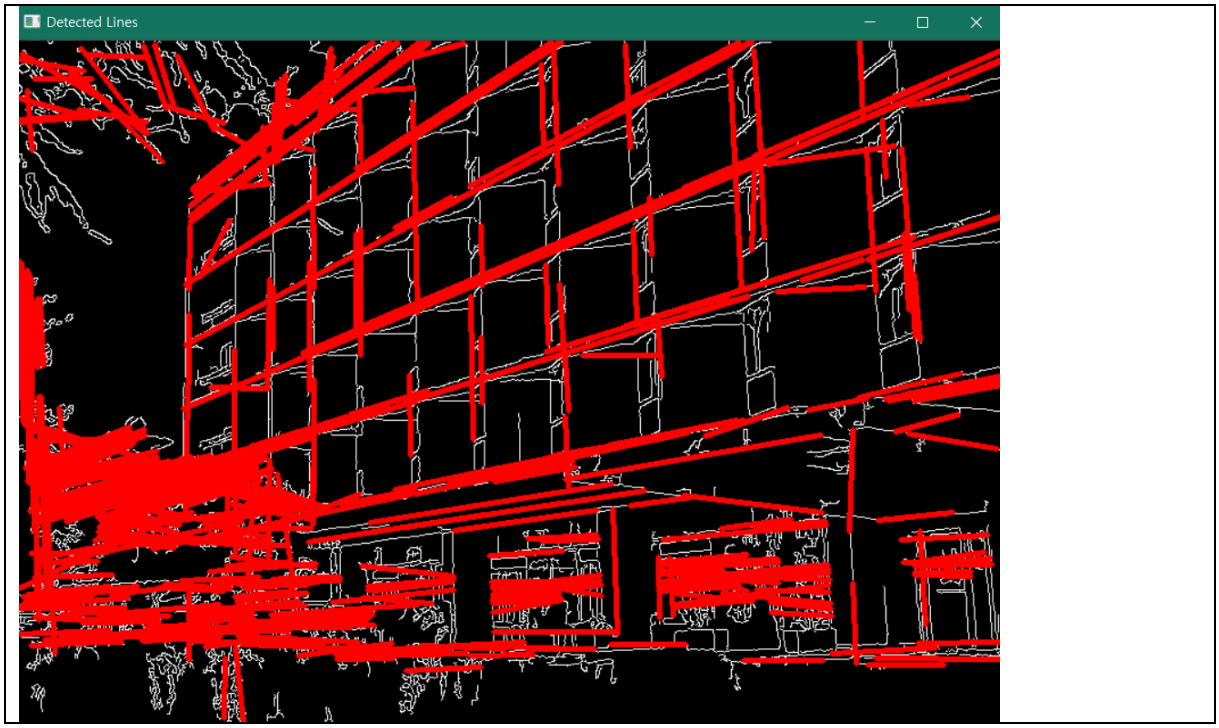
<using HoughLines>

```
HoughLines(dst, lines, 1, CV_PI / 180, 150, 0, 0);
```



<using HoughLinesP>

```
HoughLinesP(dst, lines, 1, CV_PI / 180, 50, 50, 10);
```


Detected Lines