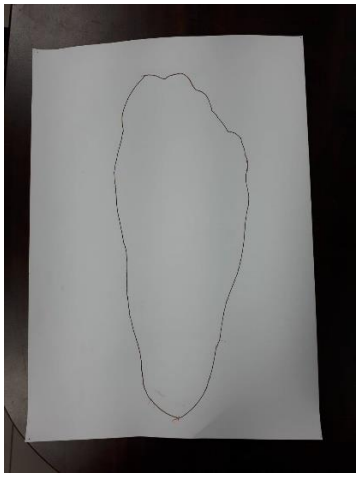
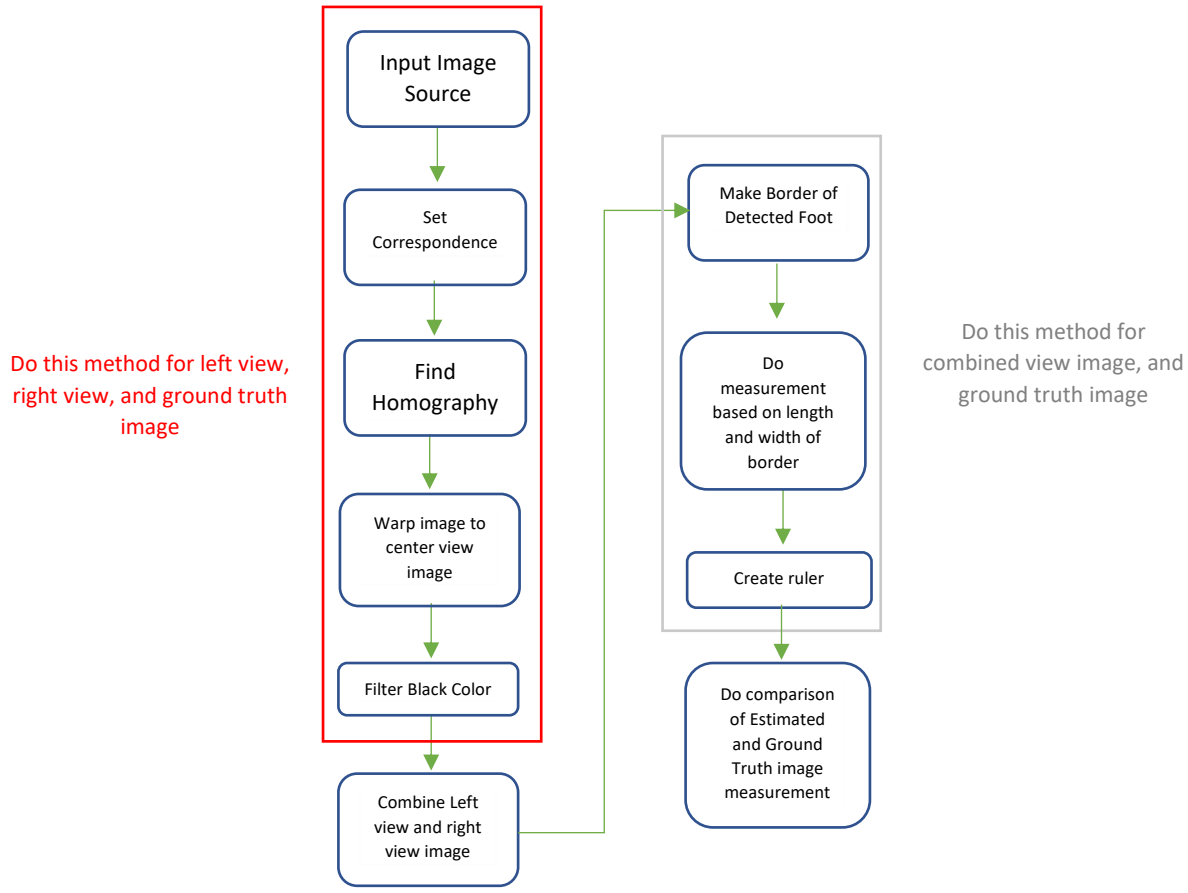
Image Source File

Left View	Right View	Ground Truth
		

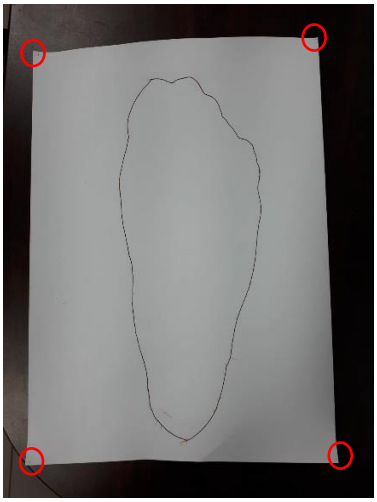
Flow Chart of Algorithm



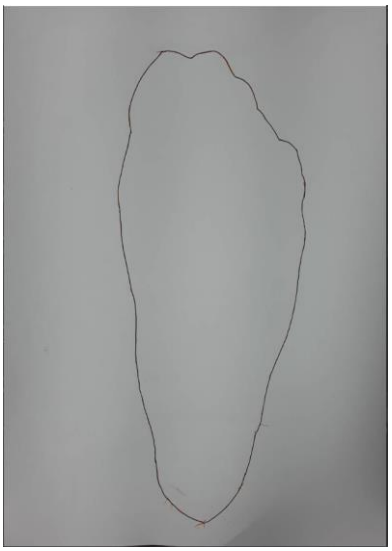
Correspondences of image

For the correspondences of image, I set 4 corners of A4 paper in the image as 4 correspondence points.

Left View	Right View
[229,231], #top left [111,1386], #bottom left [851,383], #top right [870,1324], #bottom right	[257,269], #top left [145,1287], #bottom left [947,80], #top right [1025,1411] #bottom right
Ground Truth	**Target**
[107,151], #top left [79,1369], #bottom left [934,105], #top right [995,1360] #bottom right	[0,0], #top left [0,891], #bottom left [630,0], #top right [630,891] #bottom right

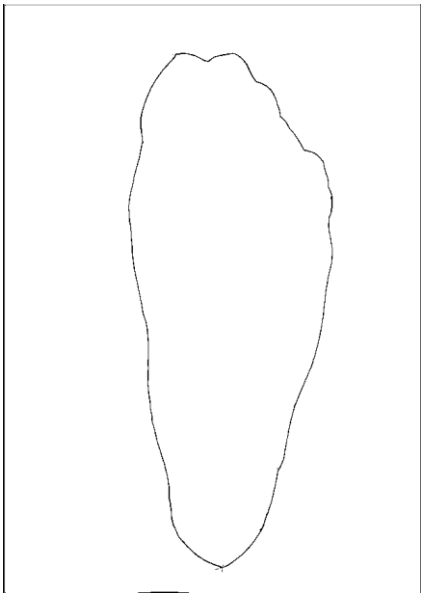
Left View	Right View	Ground Truth
		

Results of warping the image

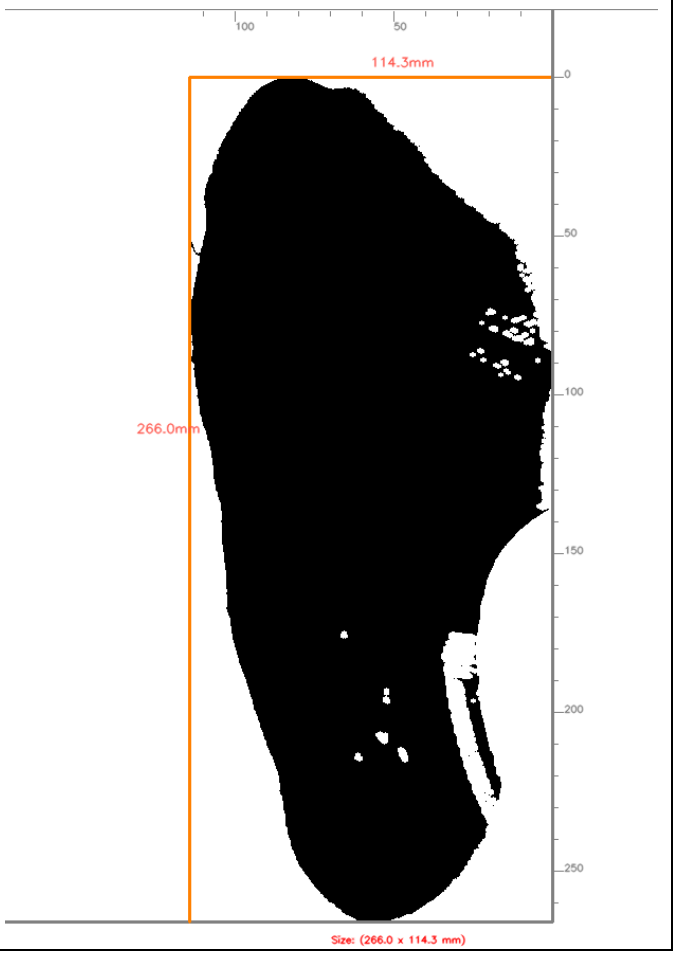
Left View	Right View	Ground Truth
		

Result of finding black color pixels

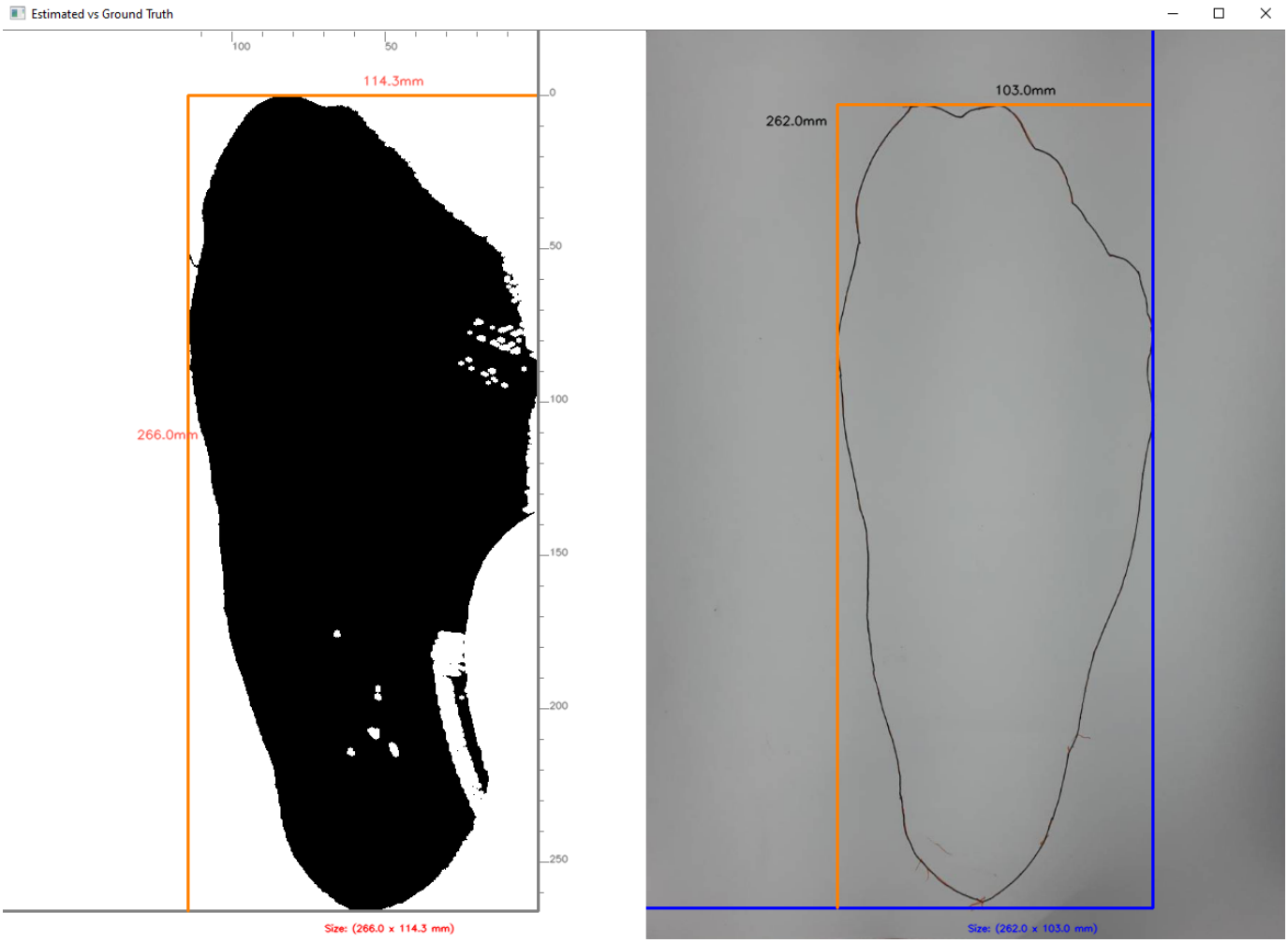
Since the socks color is black, so for getting the foot print, I need to find the black color pixels (soles of the feet) in every image. The illumination of light really affect the result, so I think good lighting setting will give good result.

Left View	Right View	Ground Truth
		

Result of Combined Foot Print and Measured Foot Print Images

Combined Foot Print	Measured Foot Print
	

Comparison of Estimated and Ground Truth Measurements



Comparing of these two measurement images, estimated measurement is bigger than ground truth measurement. I realized this problem could happen because when I drew my foot print on paper, the tip of pen didn't follow the trace of foot print, so it would not be accurate 100% (as we can see, the difference is less than 1cm).So I tried to prove if my estimated measurement was correct by comparing my estimated result with real shoes measurement. As we can see, my foot length in estimated measurement is 26 cm, so based on real measurement table, my size of shoes should be 42 to 43, and my shoes size is 42, so it is close to be correct.

Note: If your foot is thick or wide,we suggest you choose one size larger!

US	UK	EU/CN	Foot length(cm)
4	2	35	22.5
5	3	35.5/36	23
5	4	37	23.5
6	5	38	24
7	6	39	24.5
8	7	40.5/40	25
8.5	7.5	41	25.5
9	8	42	26
10	9	43	26.5
10.5	9.5	44	27
11.5	10	45	27.5
12	11	46	28
13	12	47	28.5
14	13	48	29