

drink-machine(no mosaic, too few match)



step2

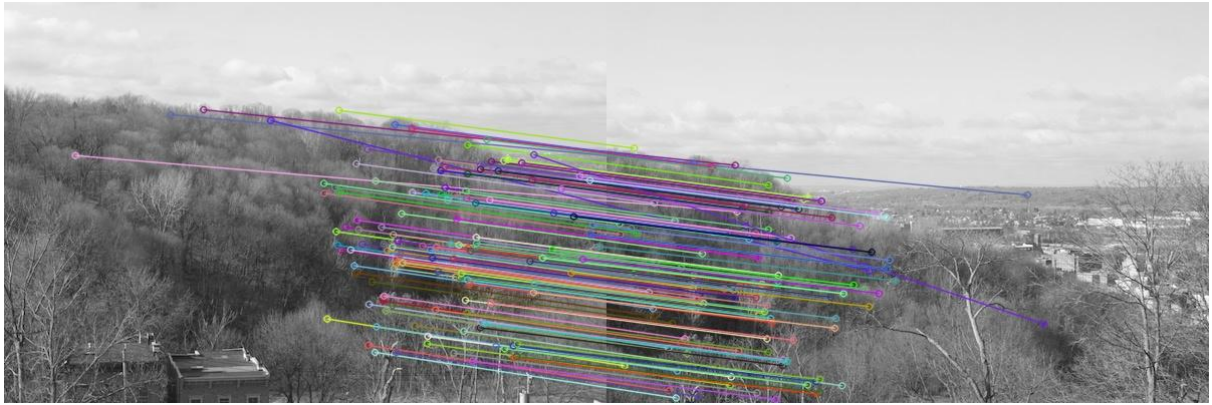


step4

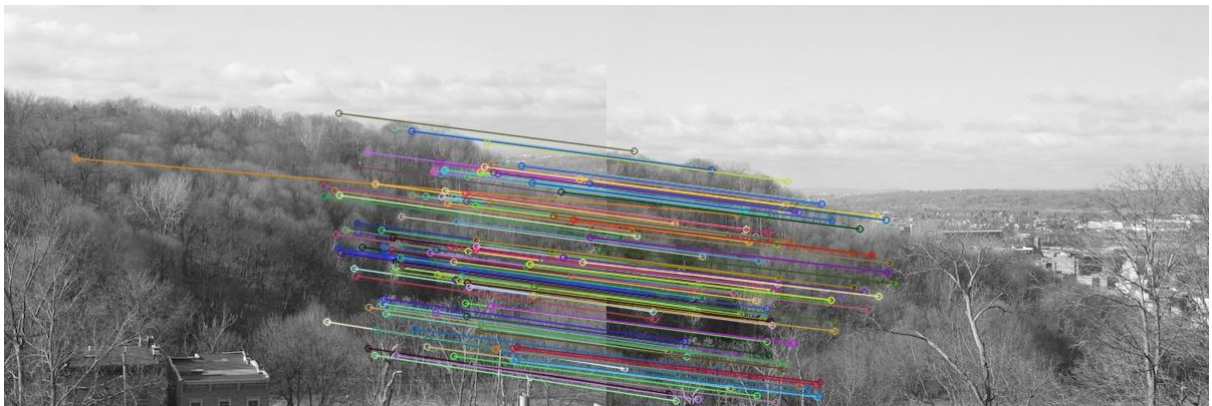


step6

frear-park(there is a mosaic)
step2



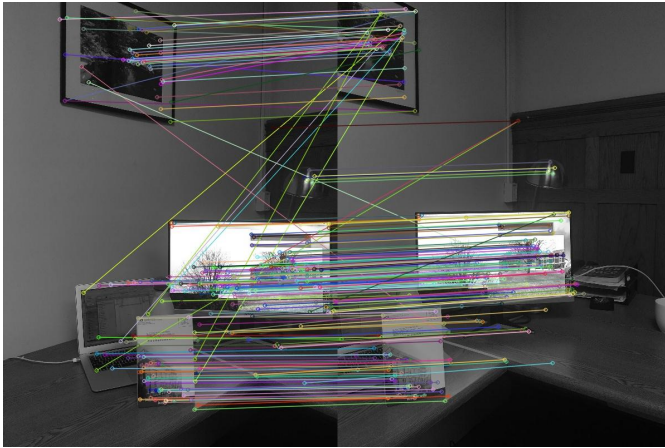
step4



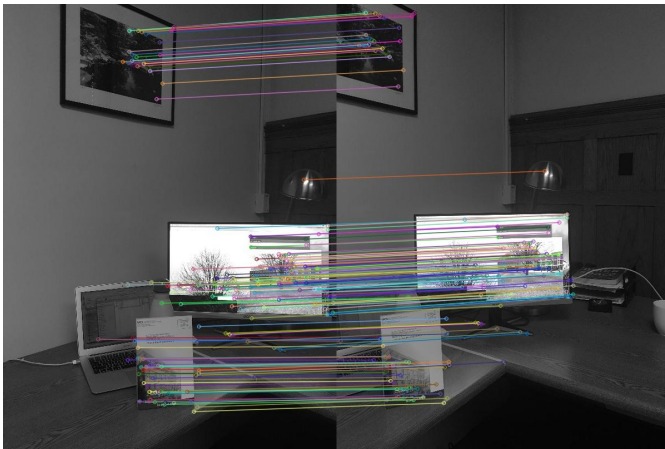
step6



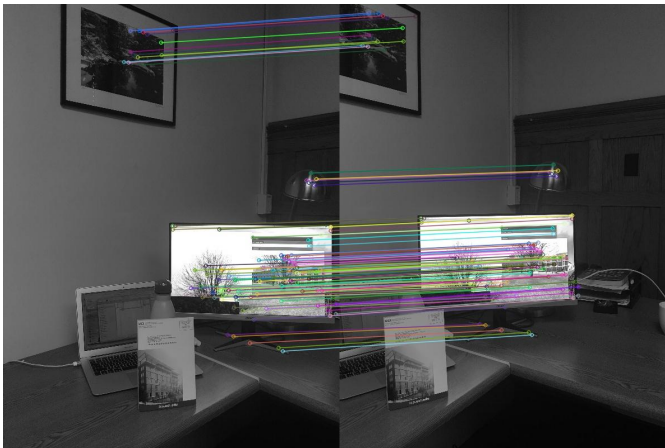
office(there is a mosaic)



step2

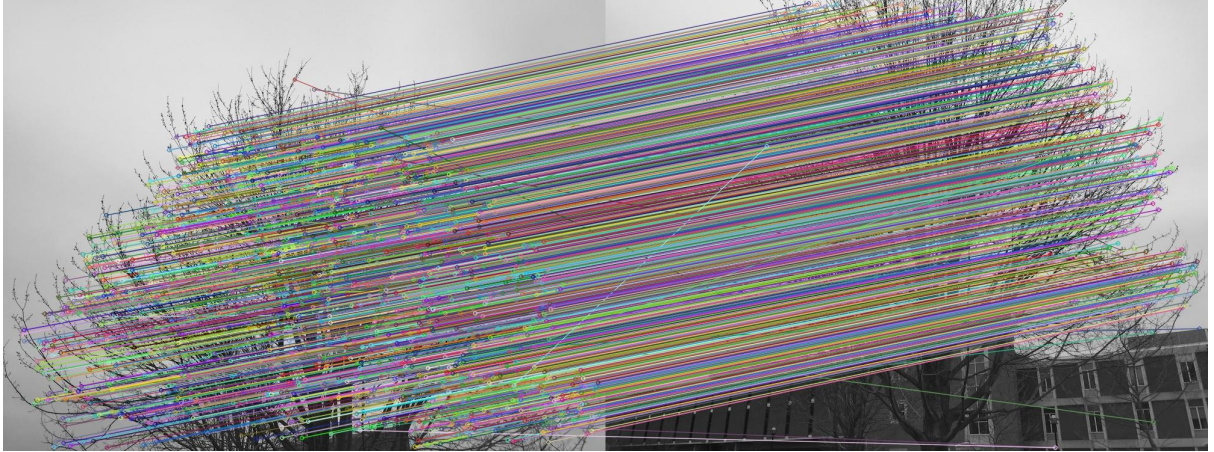


step4

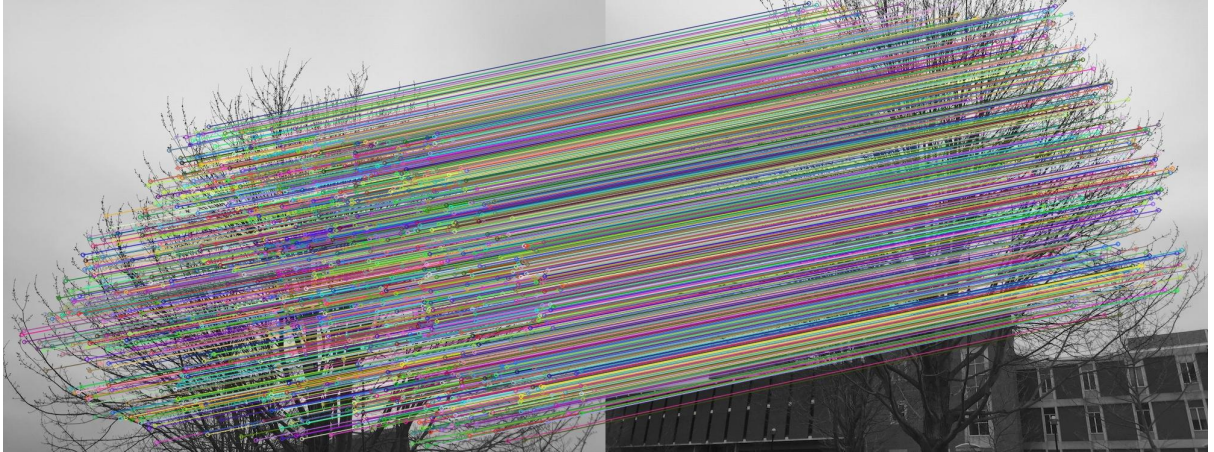


step6

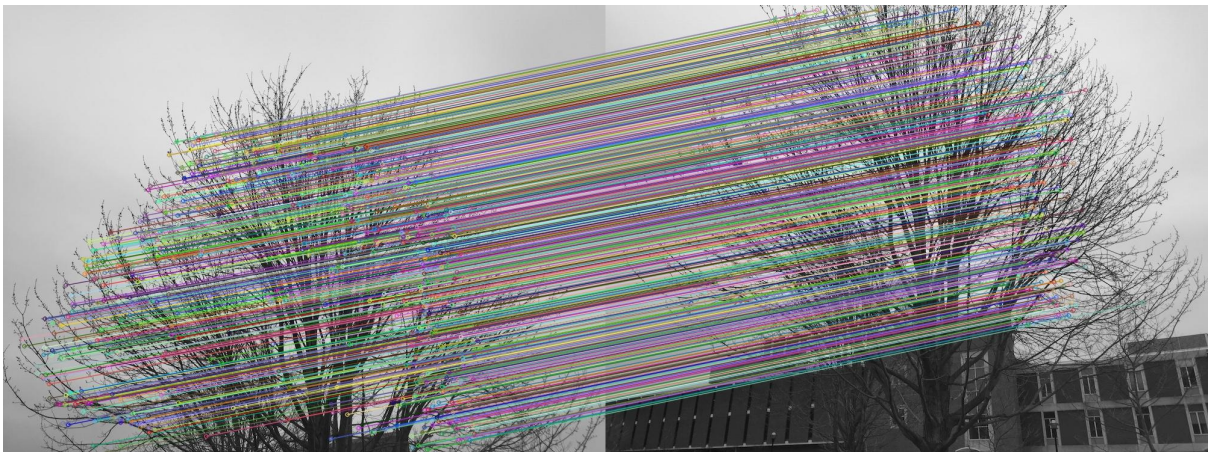
tree-mrc(there is a mosaic)
step2



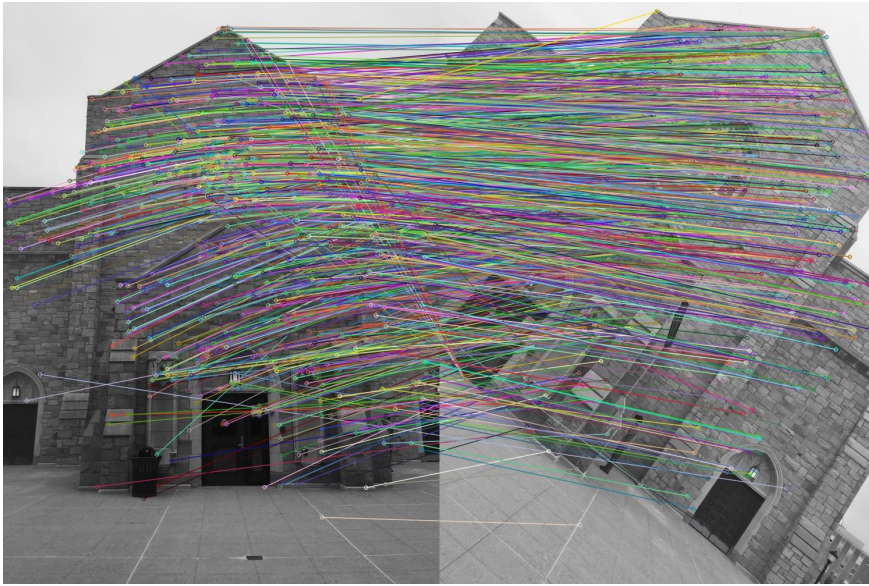
step4



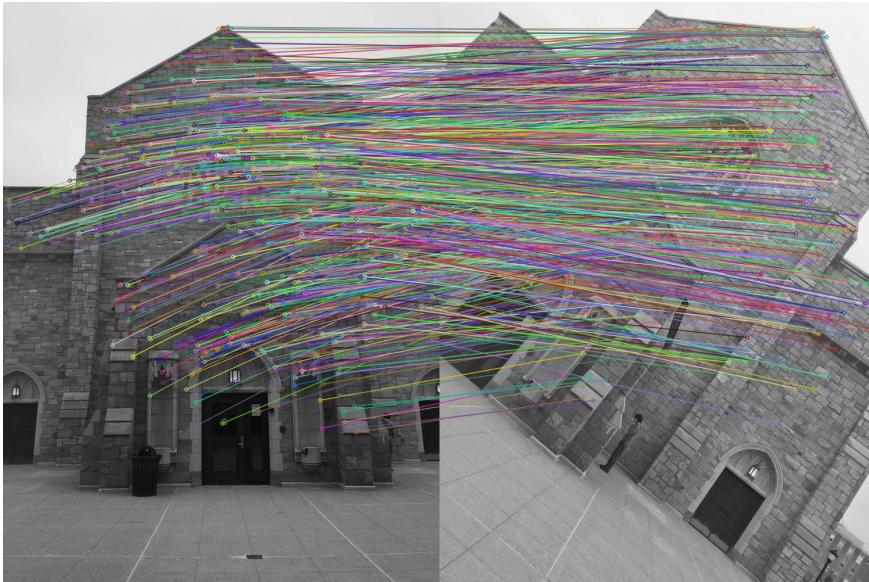
step6



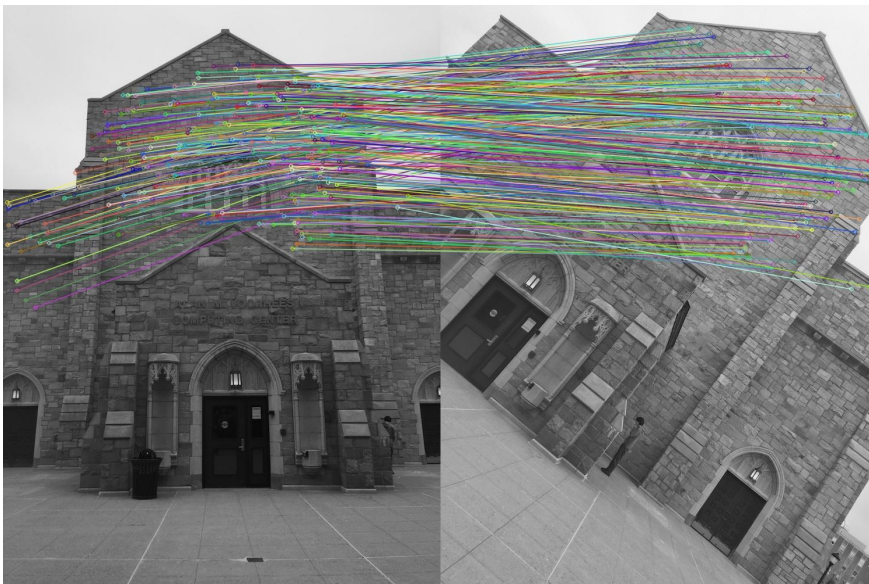
vcc-entrance(there is a mosaic)



step2



step4



step6

Algorithm Description:

for each image pair in the folder:

 run SIFT for key points and the matches from the descriptor

 get F matrix and inlier

 if F inlier is good enough:

 get H matrix and inlier

 if H inlier is good enough:

 generate mosaic

Threshold values:

Step2: for SIFT ratio, the distance between the descriptor pair must be larger than 0.8

Step3: to decide if the percentage of matches is good enough, the threshold value is 5%

Step4: None

Step5: to decide if the F inlier ratio is good enough, the threshold is 0.2

Step6: None

Step7: to decide if the H inlier ratio is good enough, the threshold is 0.4

Final Tables:
drink-machine

	Keypoints	F inlier	H inlier
img1 & img2	309	136	29
img1 & img3	118	-	-
img2 & img3	364	134	39

frear-park

	Keypoints	F inlier	H inlier
img1 & img2	152	144	130

office

	Keypoints	F inlier	H inlier
img1 & img2	258	177	117
img1 & img3	151	89	37
img2 & img3	121	72	38

tree-mrc

	Keypoints	F inlier	H inlier
img1 & img2	1621	1395	660
img1 & img3	503	317	114
img1 & img4	110	-	-
img2 & img3	1295	907	393
img2 & img4	309	-	-
img3 & img4	730	500	190

vcc-entrance

	Keypoints	F inlier	H inlier
img1 & img2	965	776	434
img1 & img2	125	26	9
img1 & img2	202	-	-

Overall result:

Though I did not manage to generate the final mosaic, based on the previous 7 steps I did, I am confident that my thresholding is generally decent. The image pairs that took from the same position are marked "good" for mosaic.: