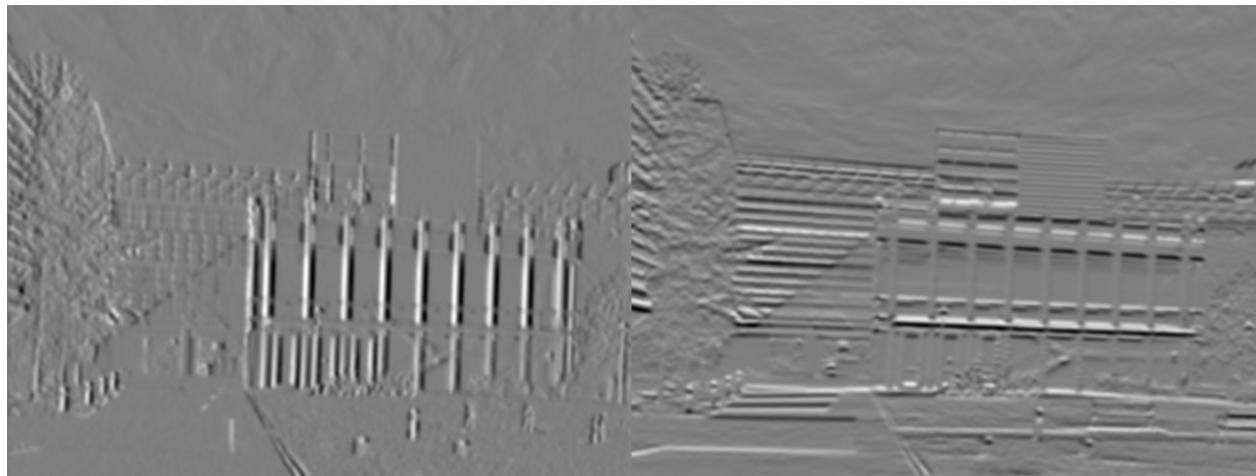


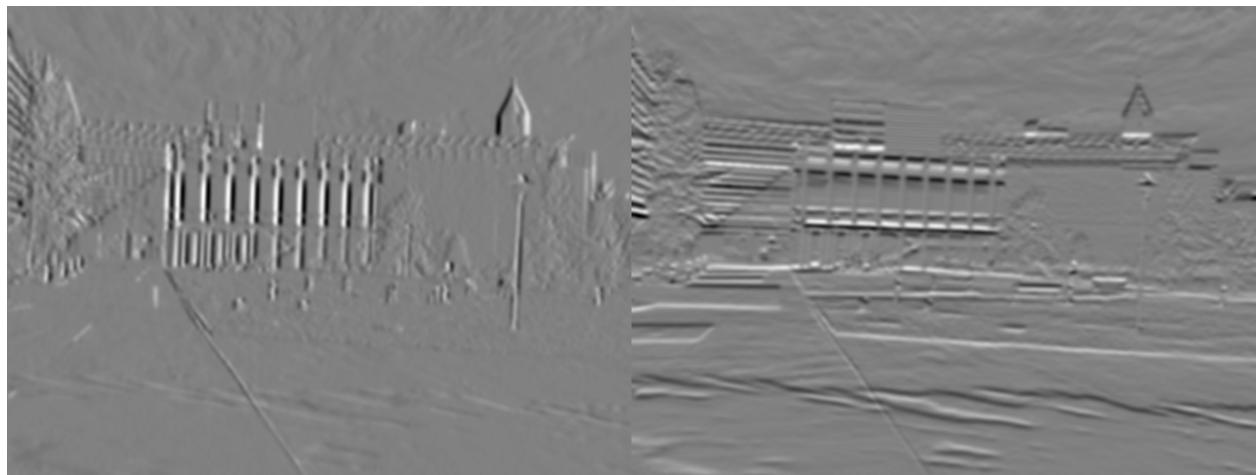
Jacob Kerstetter
4406239

Problem Set #5 - ECE1390

1a.

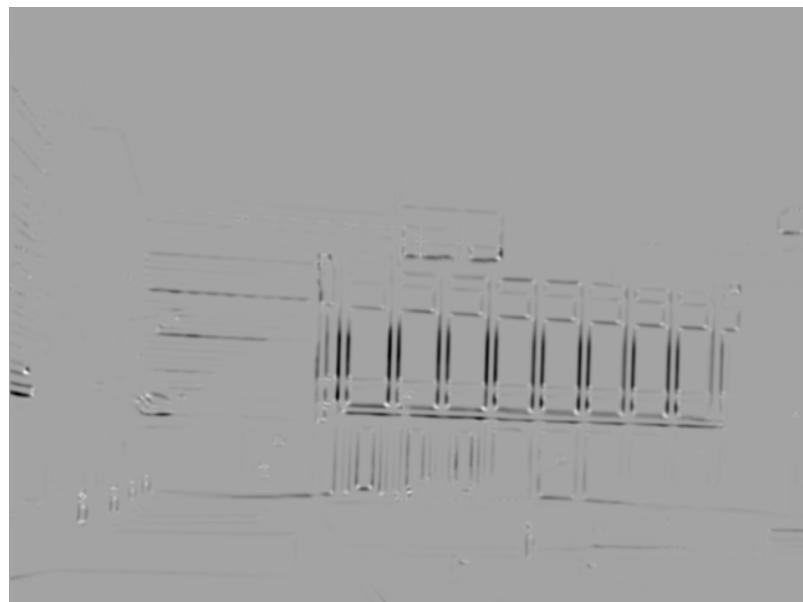


ps5-1-a-1.png

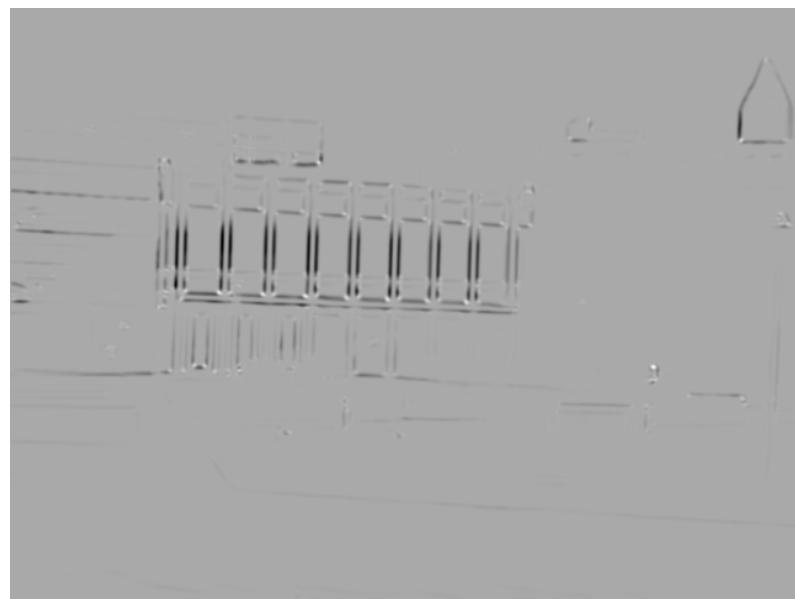


ps5-1-a-2.png

1b.



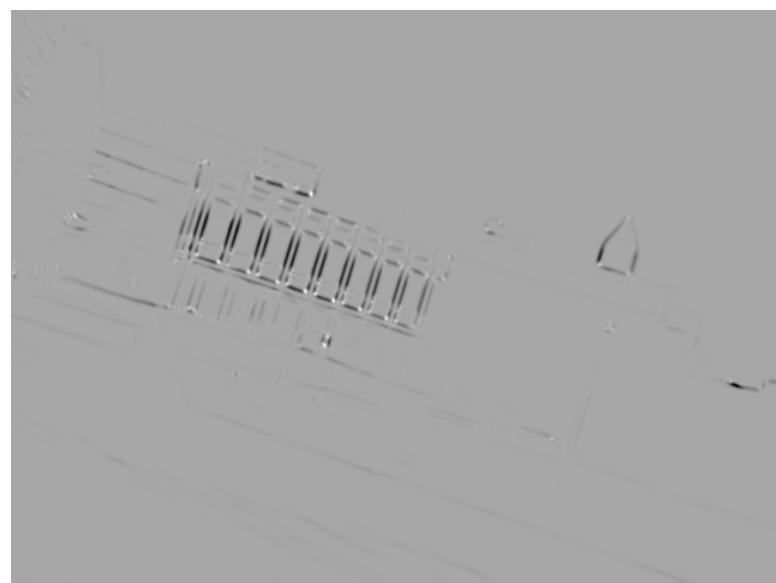
ps5-1-b-1.png



ps5-1-b-2.png

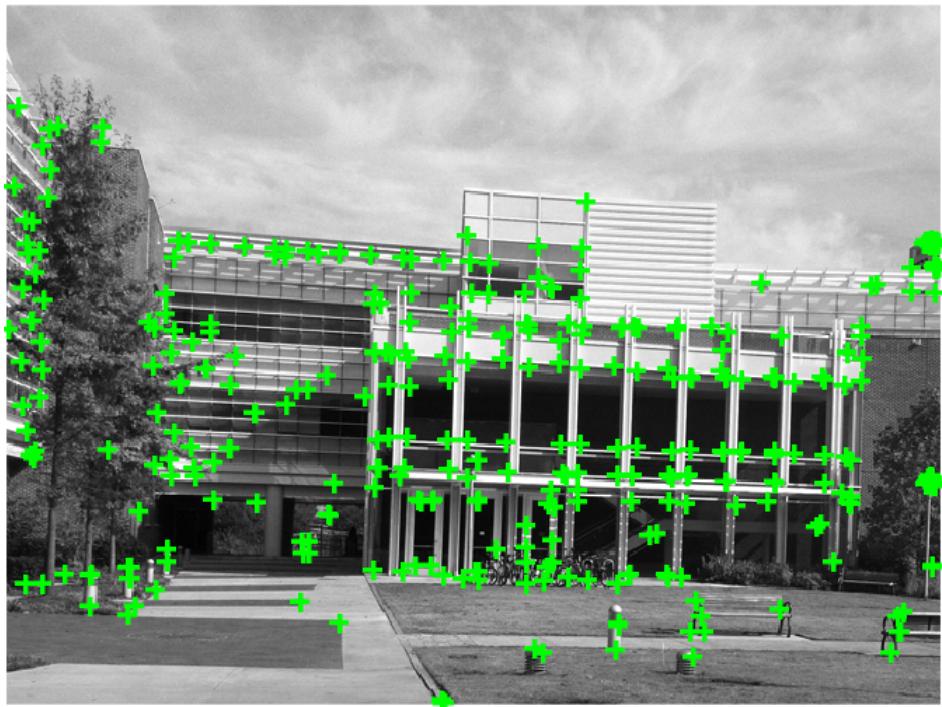


ps5-1-b-3.png

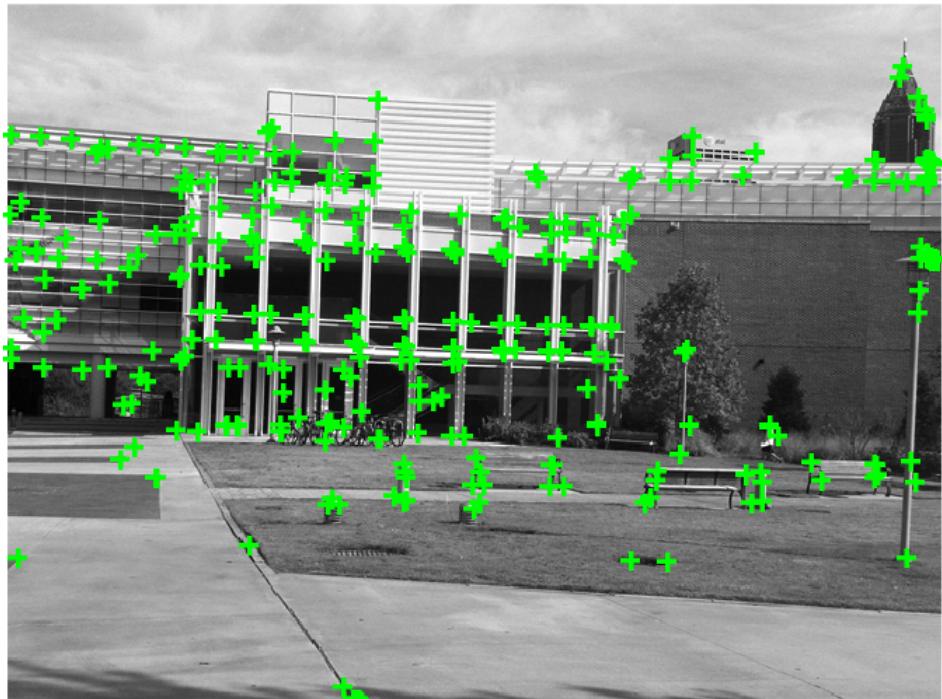


ps5-1-b-4.png

1c.



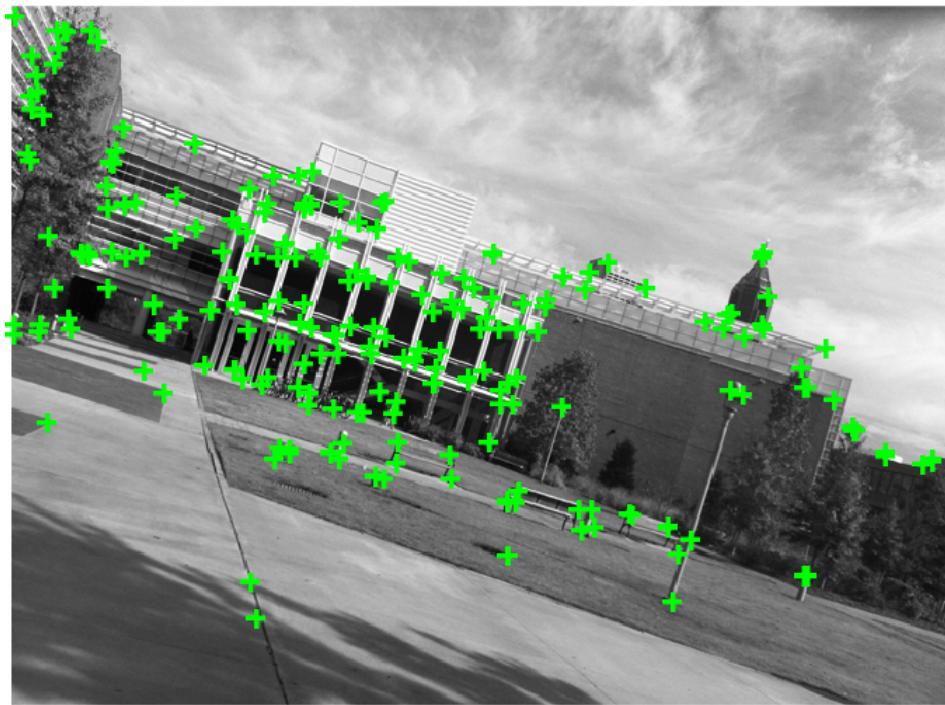
ps5-1-c-1.png



ps5-1-c-2.png



ps5-1-c-3.png



ps5-1-c-4.png

In the translational transform image set, most of the obvious corner points detected are detected in both images. Some of the corners in the sidewalk are detected in the second image but not the

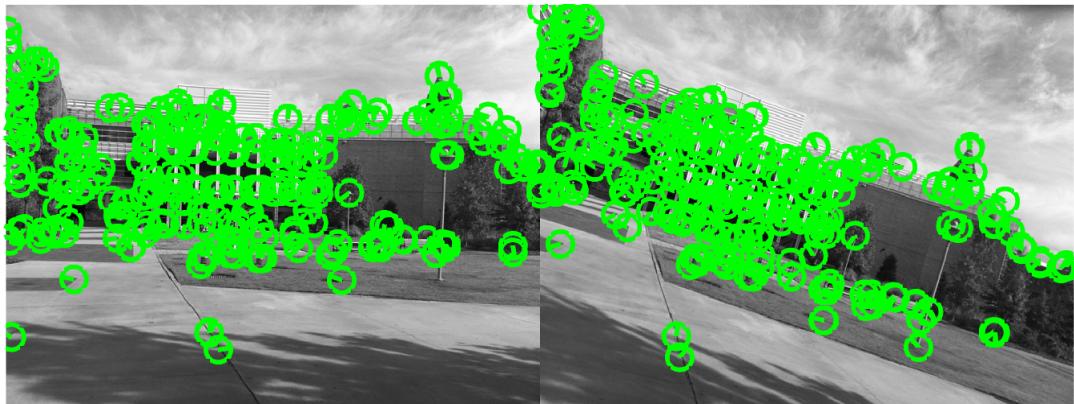
first. The other difference is more corners are detected in the underpass in the second image, but most of the corners are detected in both images.

In the similarity transform image set, the corners are again detected well in both images. In the second image, more points are detected in the main part of the building (white/black portion).

2a.



ps5-2-a-1.png



ps5-2-a-2.png

2b.



ps5-2-b-1.png



ps5-2-b-2.png

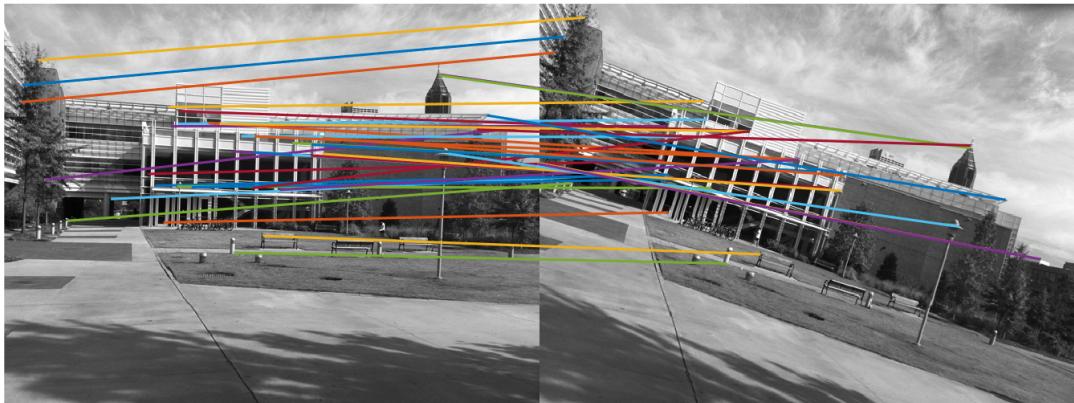
3a.



ps5-3-a-1.png

Translation Vector: [-140; -95]

Consensus Set: 68 out of 133 = 51.1%



ps5-3-b-1.png

Transform Matrix:

[1.0239, -0.2869, 29.3347;]

[0.2869, 1.0239, -68.1435;]

[0, 0, 1]

Consensus Set: 39 out of 64 = 60.9%