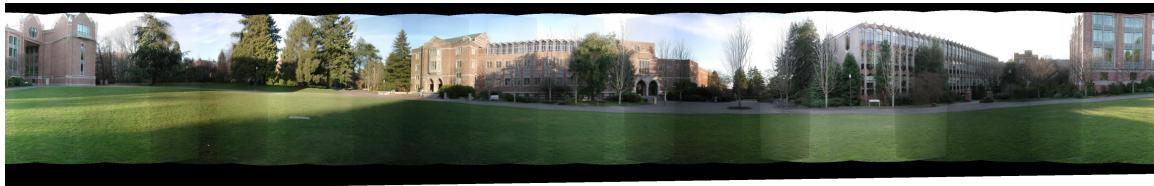


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## Project 2: Panorama Stitching

### Test Set

Using my own circular feature matching algorithm from project 1, below shown are the PanoramaSampleMac results and my own (in that order). As you can see, result matches the sample solution quite nicely.



### My Own Panorama- Forest Park

This panorama did not come out as well as I would've liked, but I think it can be attributed to the quality of the picture taking- the tripod was set on an uneven surface and I attempted to readjust the tilt angle to keep the camera level. This was most likely the source for some of the blurriness. Also, I took many more pictures than was necessary for the panorama (around 30), with a ~60-70% overlap instead of 50%. This excess amount of images probably exacerbated the issue of ghosting.



### **What Worked**

For AlignPairs, I used only a simple translation to align features after the spherical projections were created. RANSAC was implemented as described in lecture and worked fairly well to find a fitting translation matrix between images.

I used a simple hat function for blending, where the diagonal/feathering segments of the trapezoid were equal to the blendWidth. This function seemed to work fairly well through testing. The A matrix was calculated in such a way to remove the vertical drift and perform the final crop, which also worked fairly well.

### **What Didn't Work so Well**

Some ghost removal and better feature detection may help the clarity of my panorama substantially, and if I had more time, I would definitely look to implement these features.