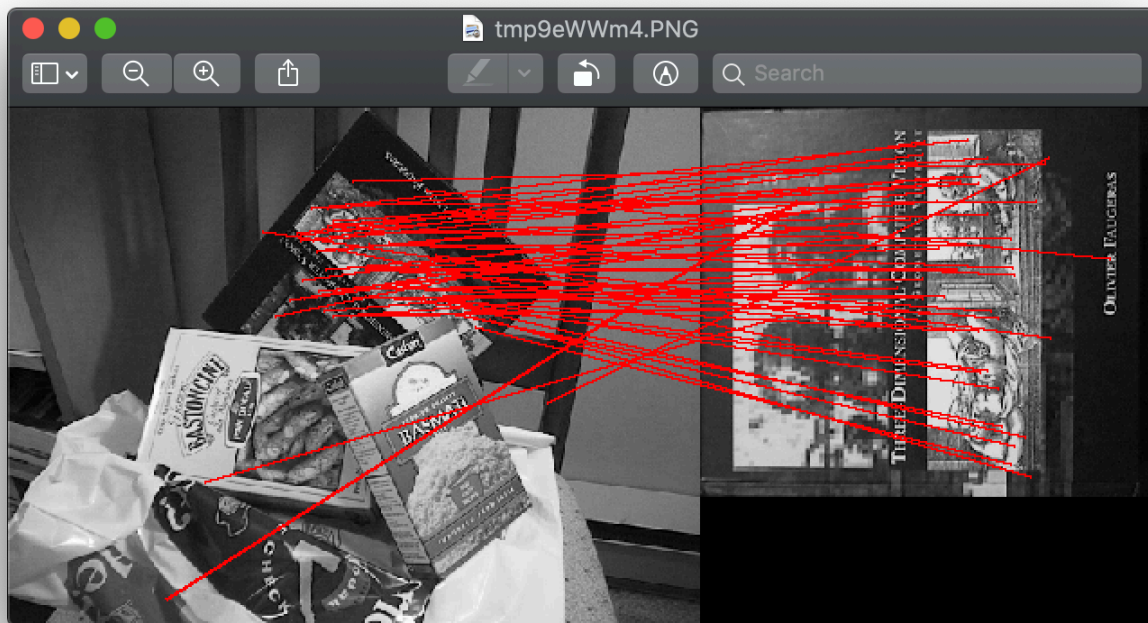


425 assignment 4:

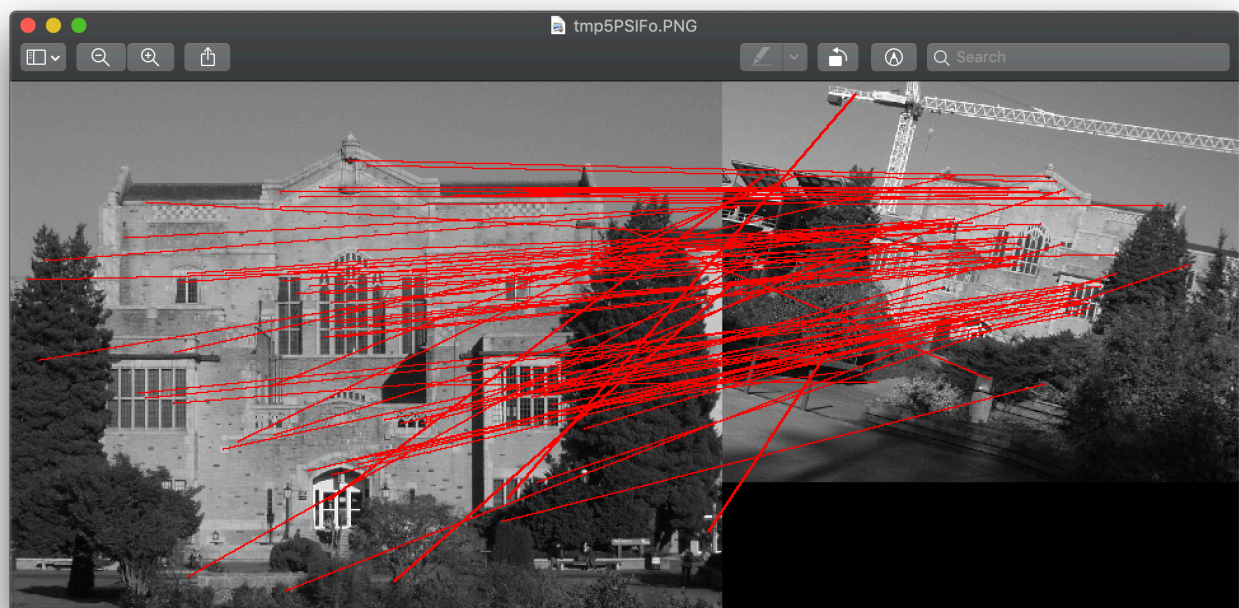
\*\*\*HANDING IN THIS ASSIGNMENT LESS THAN 24 HOURS LATE\*\*\*

First part: Looking for matching points on the two images.



I found .75-.8 (this is .77) to be a good threshold value for the  $\frac{\text{sorted\_angles}[0]}{\text{sorted\_angles}[1]}$  ratio. Below .7 you just don't get enough matches, and above about .9 you get too many outliers. Its important to get this value right because we want alot of matches in order to be able to recognize an image from local features, but not have too many outliers where that gets in the way of making a good match.

Second part: Using RANSAC to remove outliers



Leticia Nakajima

Checking the consistency of orientation and scaling between matching pairs on images help remove outliers because we assume that transformations of an image from another will be standard and applicable universally - so removing the one's that don't match the common transformation makes sense. The effect is that we are left with way less/no outliers. It allows us to raise the matching threshold by a lot without getting too many outliers. ex. raising matching threshold to up to .85 - as I did above, but yielding something we can still use/ rather than having outliers all over the place.