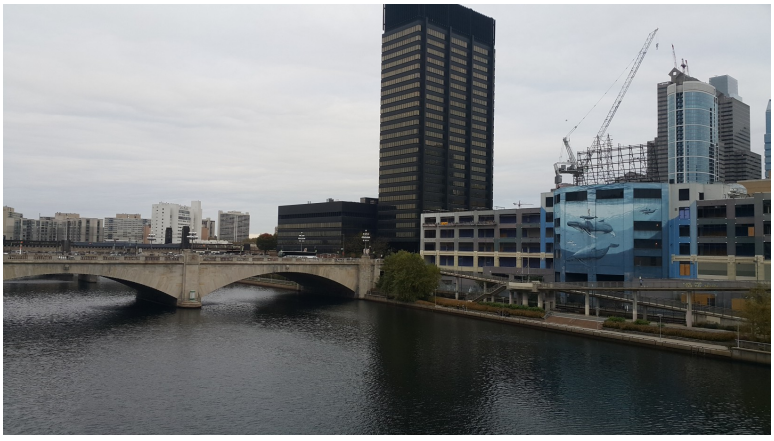
Project 3 Image Mosaic
Rony Edde (redde)

. Source images:

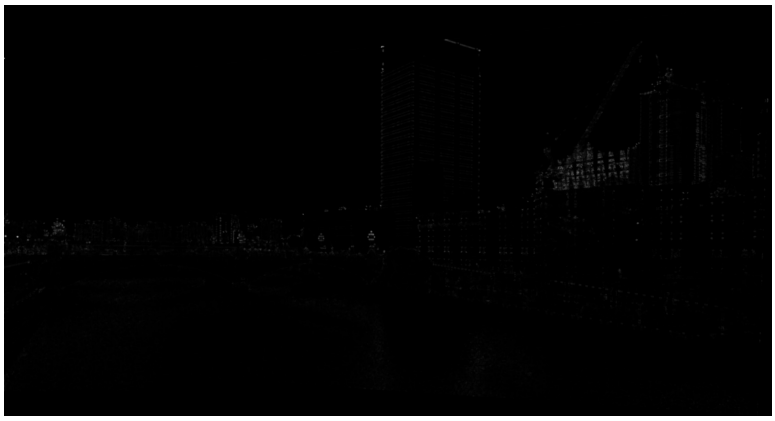
These are the 3 source images used to generate the mosaic (right panning)



Corner Detection:

Based on harris corner detection: http://slazebni.cs.illinois.edu/spring16/harris.m

Corner detection results (radius):



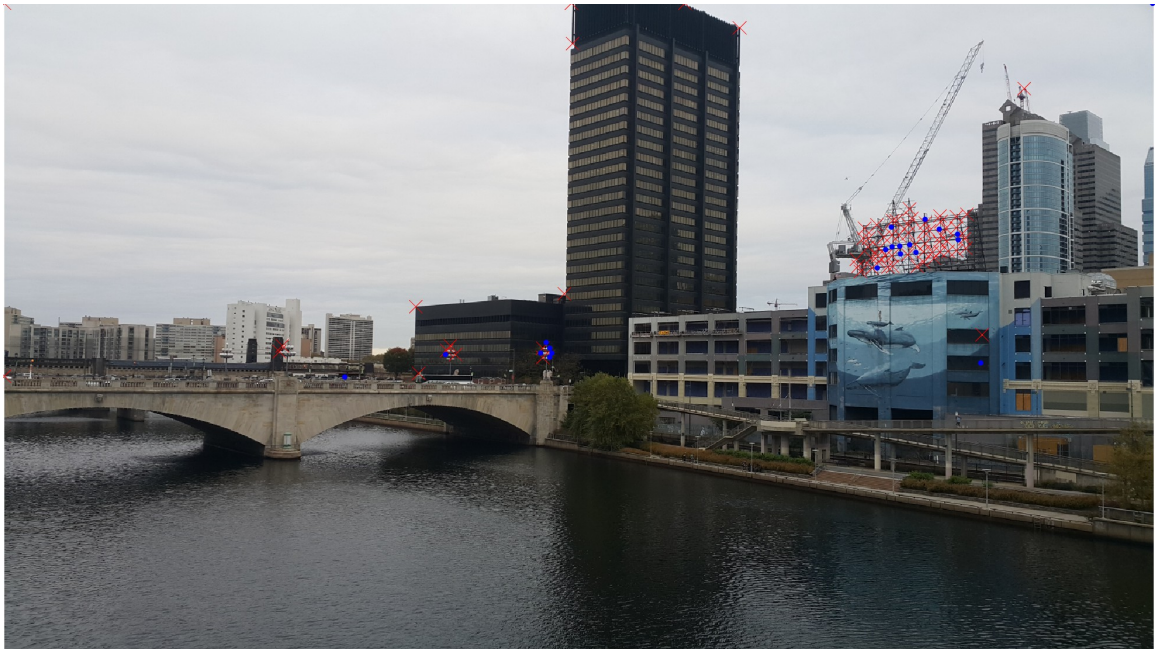
Non Maximum Suppression (remaining point matches):

First pass images (source / destination):

Non Maximum Suppression (remaining point matches):
Second pass images (source / destination):

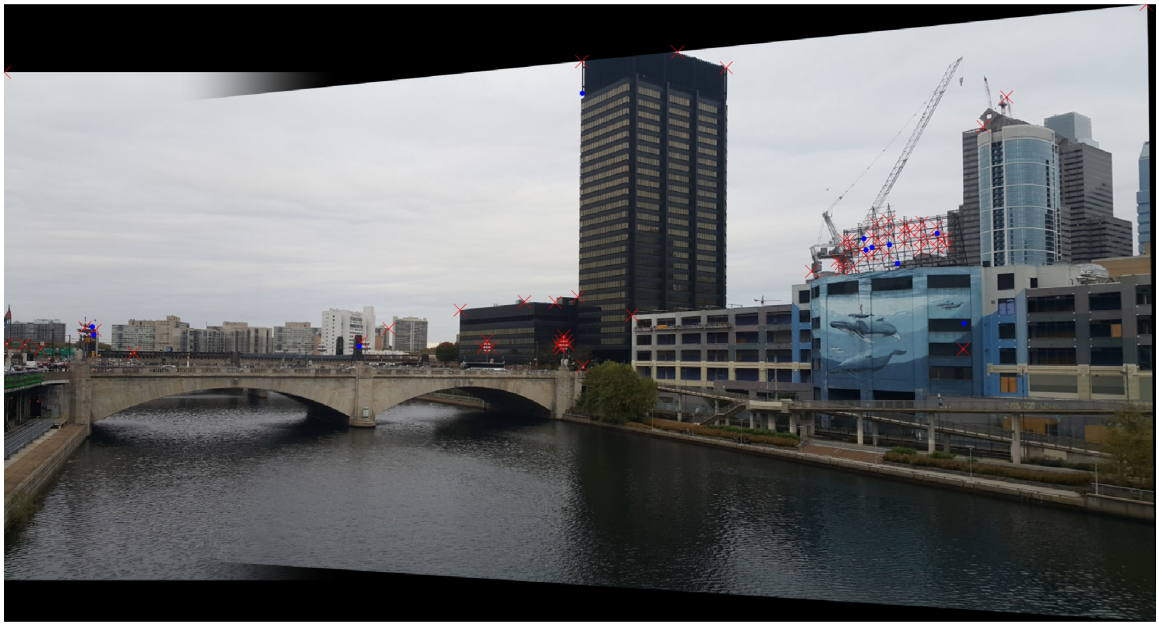
.Ransac results:

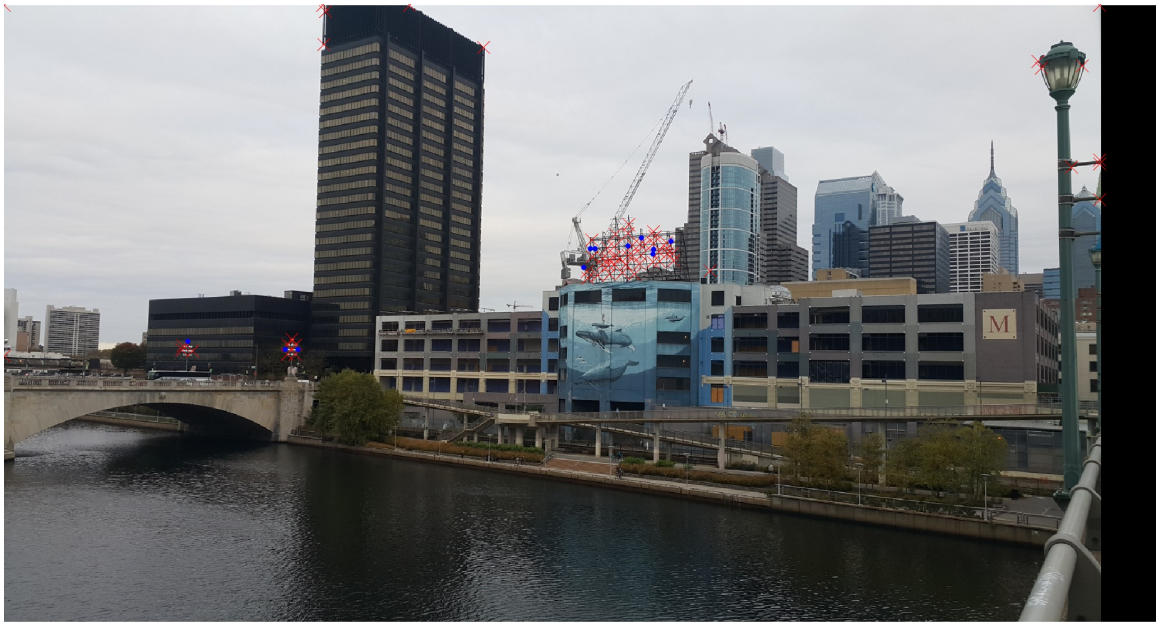
First pass:



.Ransac results:

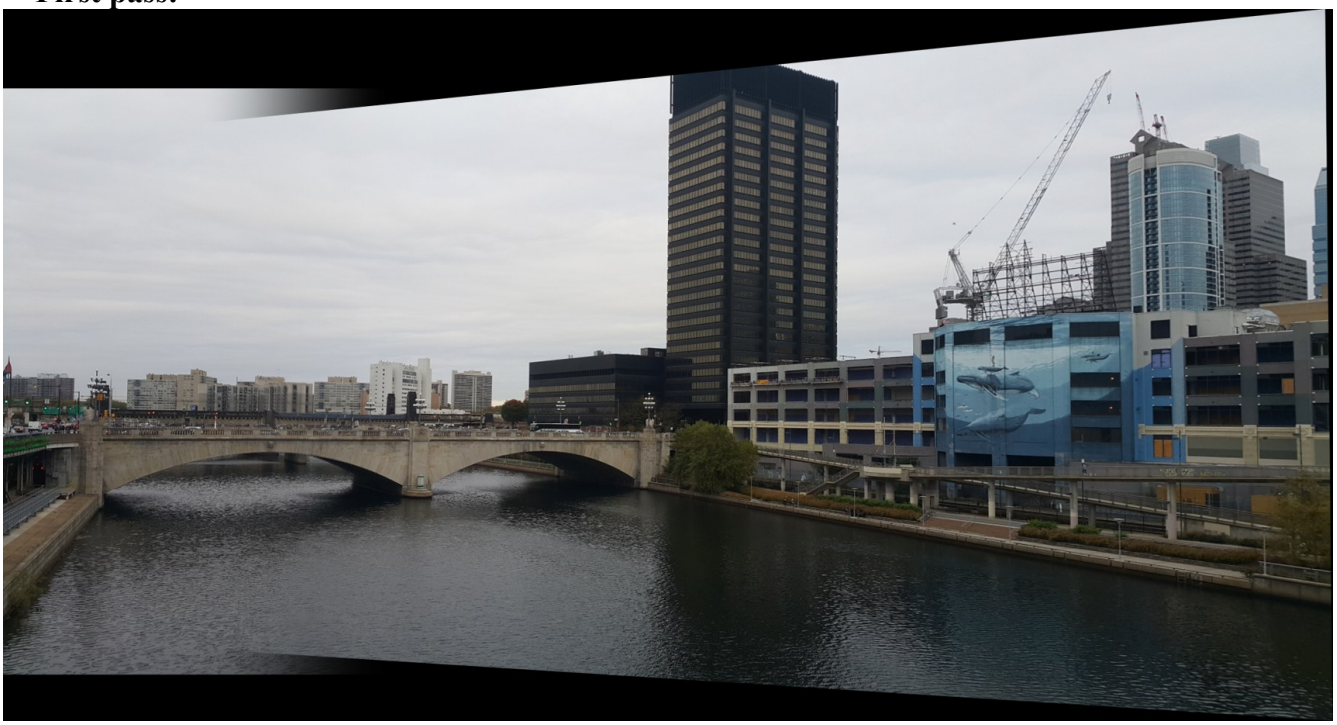
Second pass:





.Final mosaic passes:

First pass:



Second pass (final):

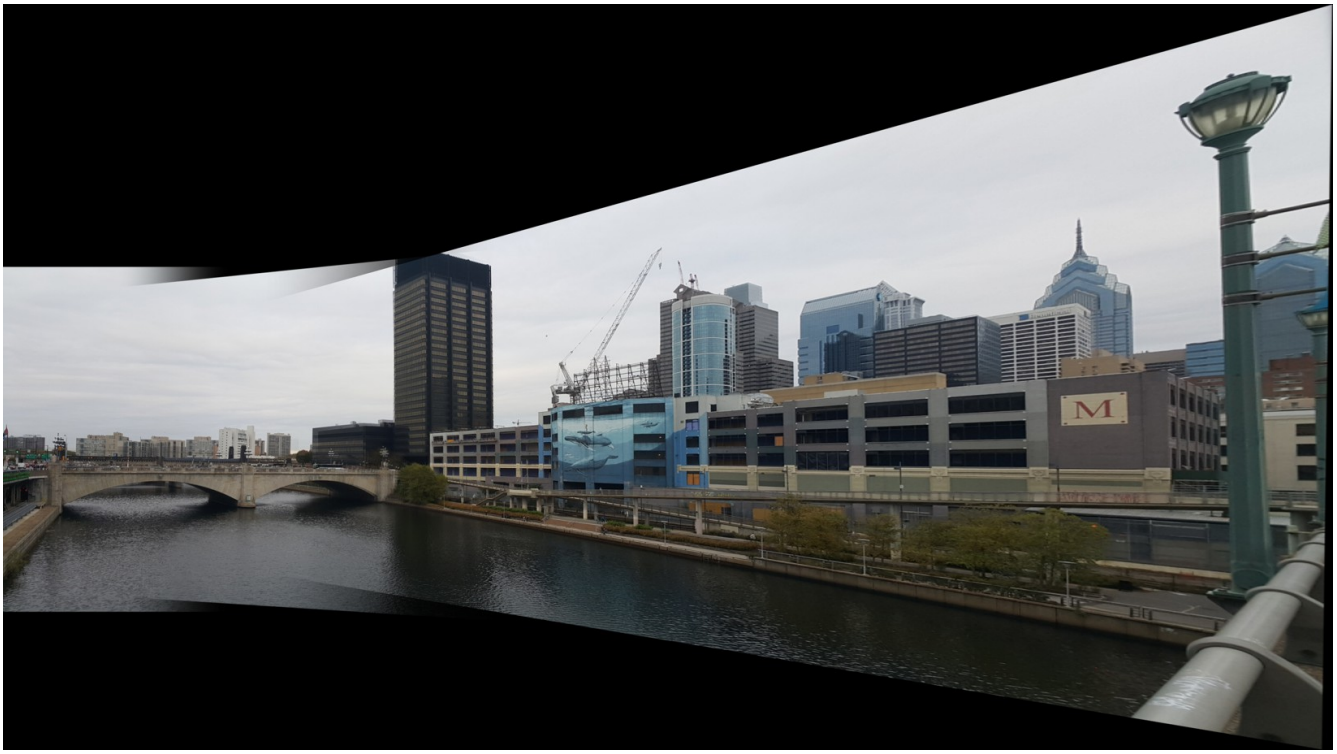
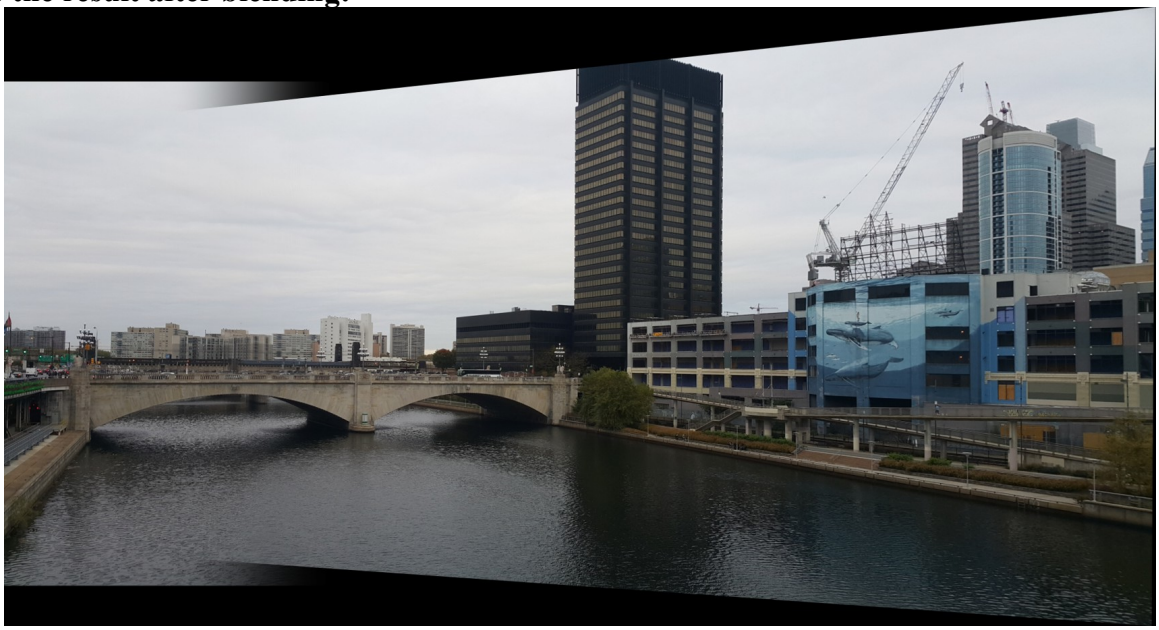


Image Blending.

Blending is computed where the 2 images coincide in similarity. This occurs at the point where the shift of the target image takes place. Using a custom interpolation with a cosine to smooth the blends, the left image is faded out from 1xcolor to 0xcolor and the right image is faded in using the compliment blend function. The width of the blend is simply the size of the shift. Here's the result without blending where the images are overlayed and added:

Here's the result after blending:



Thank You!