

Project Outlines

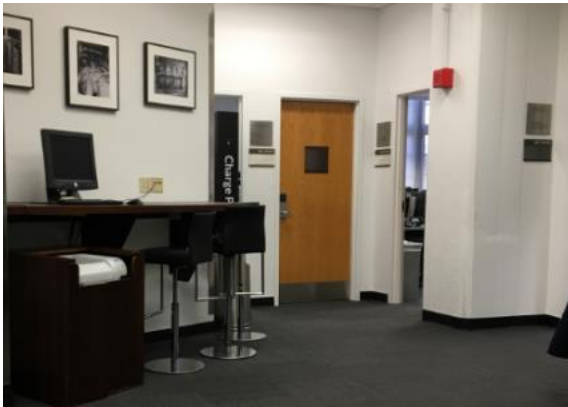
In this project, I use three images and stitch them together.

Basically, in mosaic part, I implement stitching without using 'imwarp'.

The method I use is, find four corners of destination image in source image firstly, then construct a larger reference image, and do interpolation, that is, extract intensity from two images and apply them in reference image.

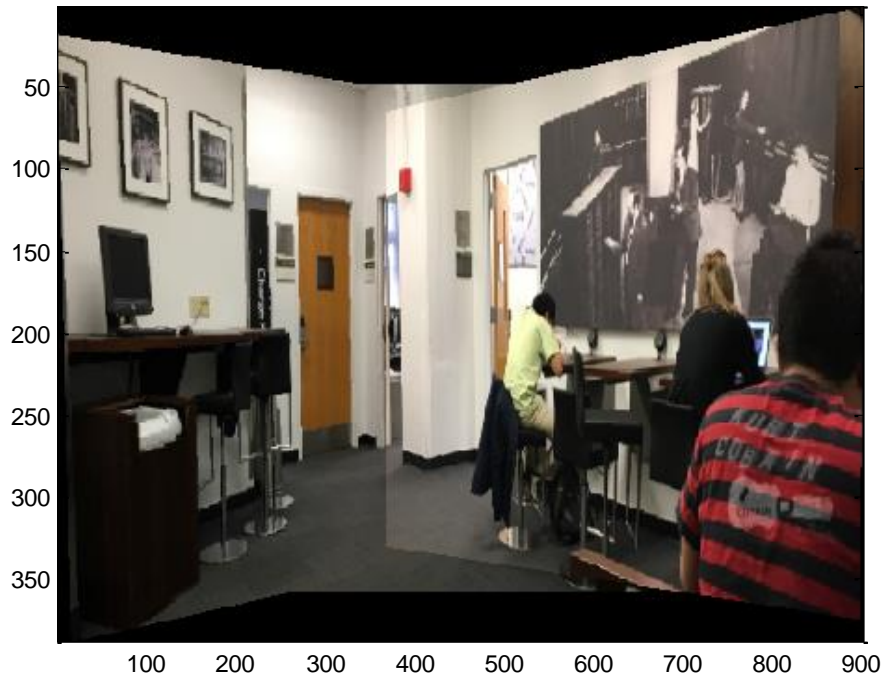
In addition, I also apply linear blending for overlap range in reference image. Therefore, the reference image is the mosaic one.

Below are my three input images:

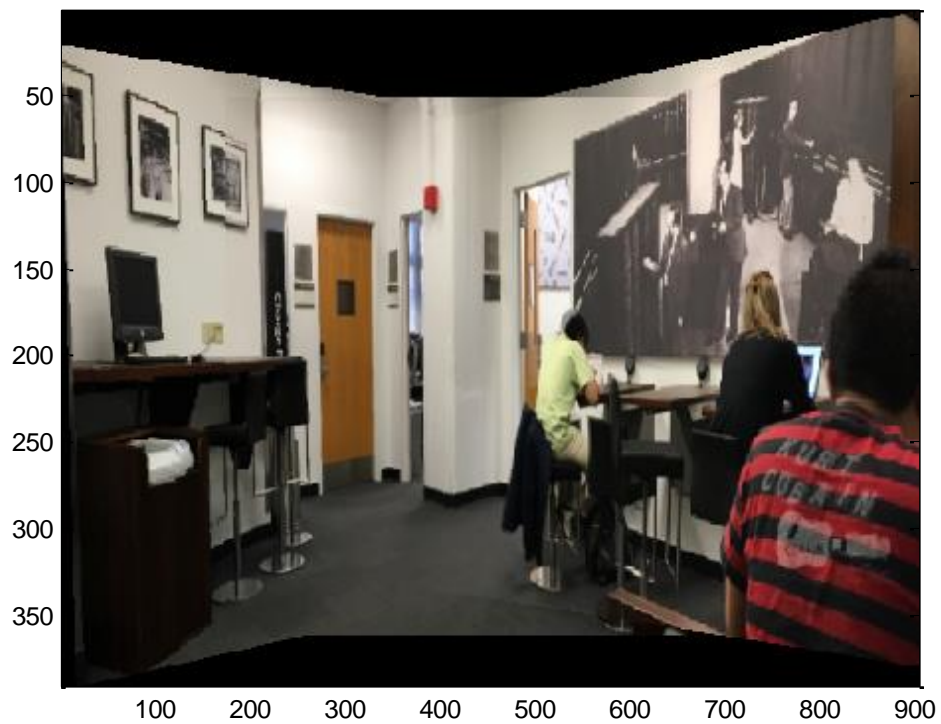


The final stitched mosaic

Before blending:



After blending:



Corner detection results

Left image

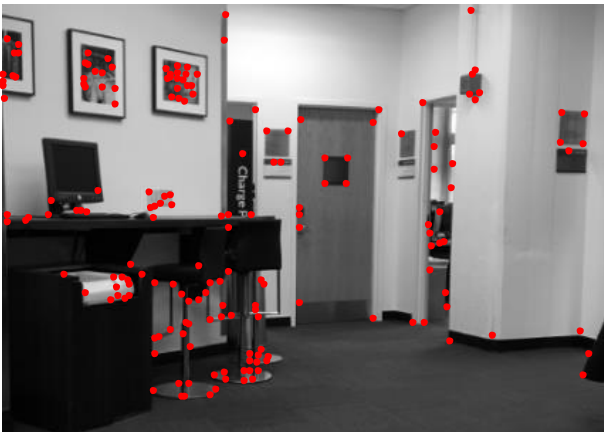


Middle image



Adaptive NMS results

Left image



Middle image



Matching result after RANSAC

Left image



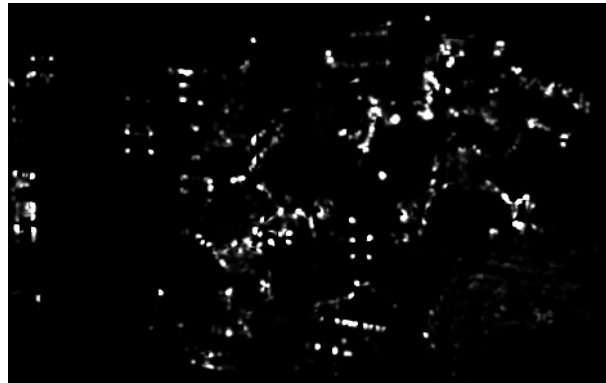
Middle image



Corner detection result of first two stitched images

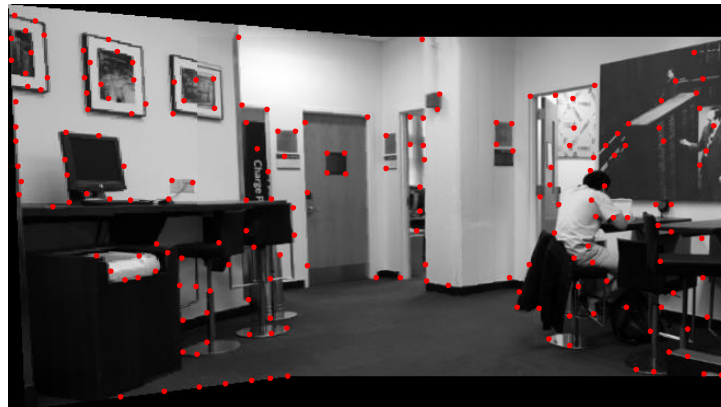


Corner detection result of right image



Adaptive NMS results

Stitched image

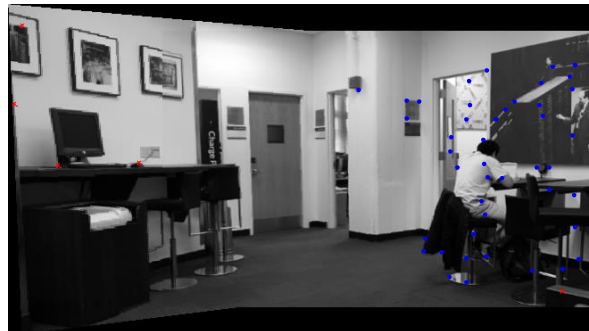


Right image

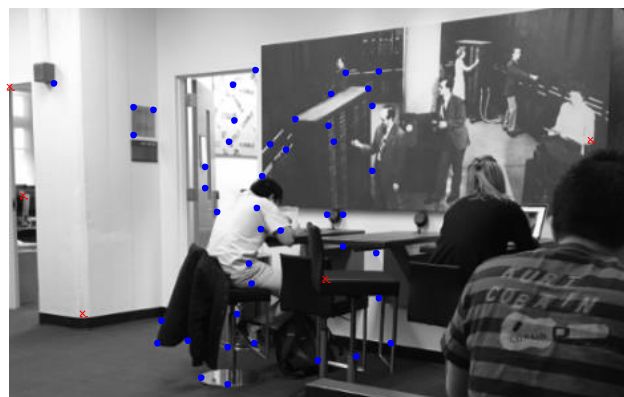


Matching results after RANSAC

Stitched image



Right image



Final result

