

Project 3A: Image Mosaic

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1 How to Run

You can run this project by executing “python mymosaic.py” from the command line with options that specify the images to be stitched. To do a nearest neighbors calculation, we used the KDTree from scipy.spatial. We use the “argparse” module to handle various inputs. These are the available options:

- **-l**: Specify the path to the left image.
- **-m**: Specify the path to the middle image.
- **-r**: Specify the path to the right image.

Please note that this project works for stitching strictly three images together.

2 Potential Packages to Install

- argparse
- scipy.spatial.KDTree

3 Image Outputs

3.1 Classroom

3.2 Street

Figure 1: ANMS for the left image

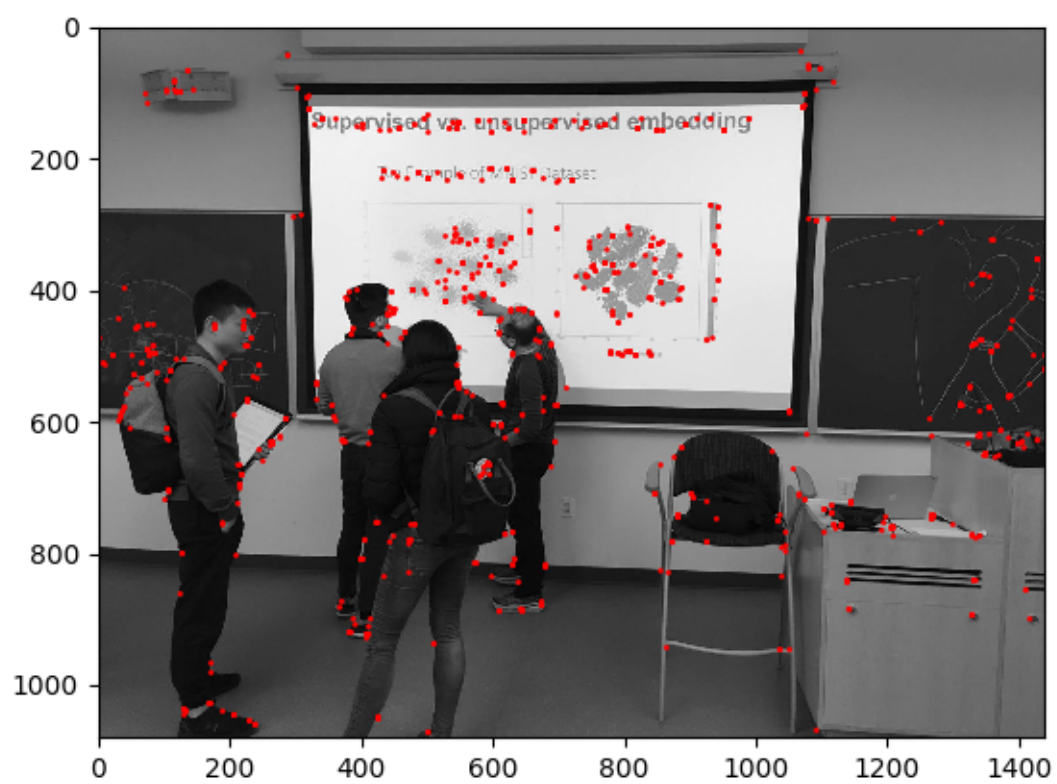


Figure 2: ANMS for the middle image

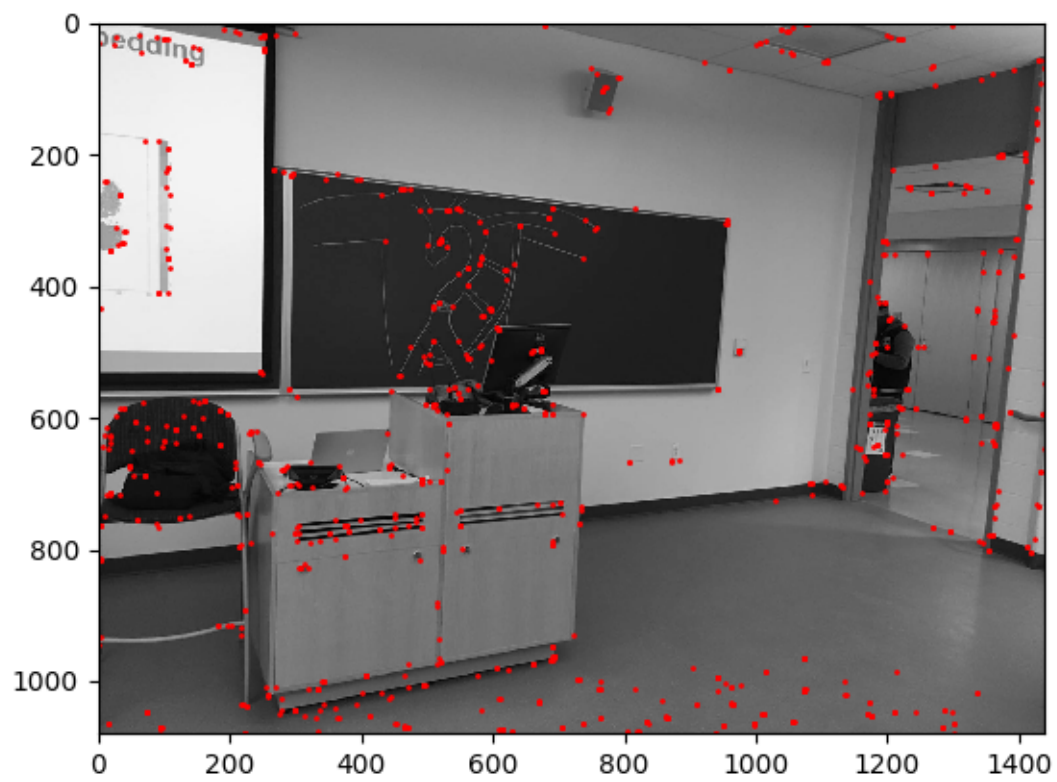


Figure 3: ANMS for the right image

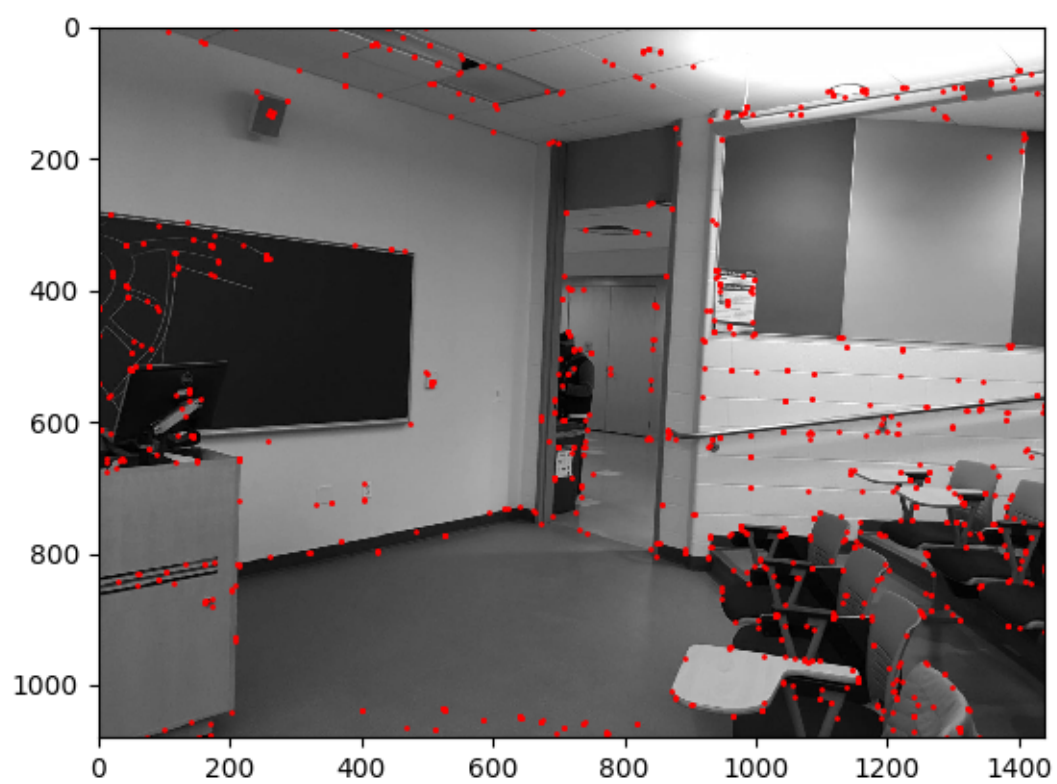


Figure 4: Post-RANSAC points using the left and middle images

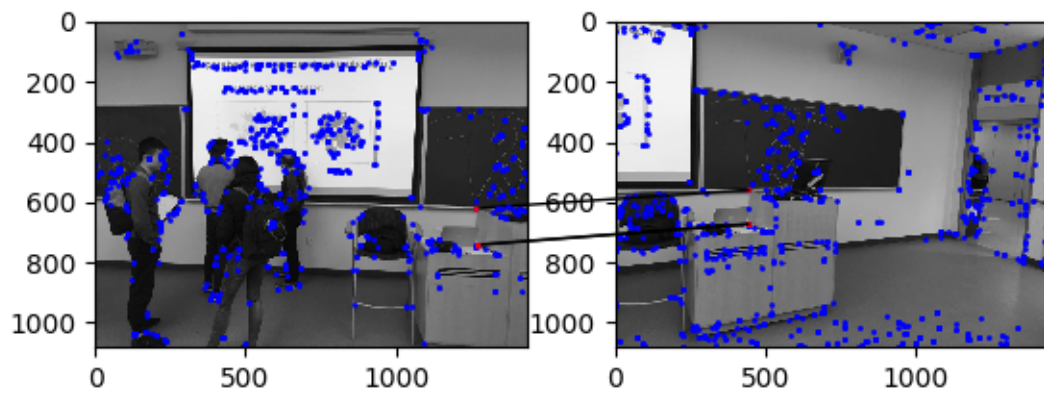


Figure 5: Post-RANSAC points using the middle and right images

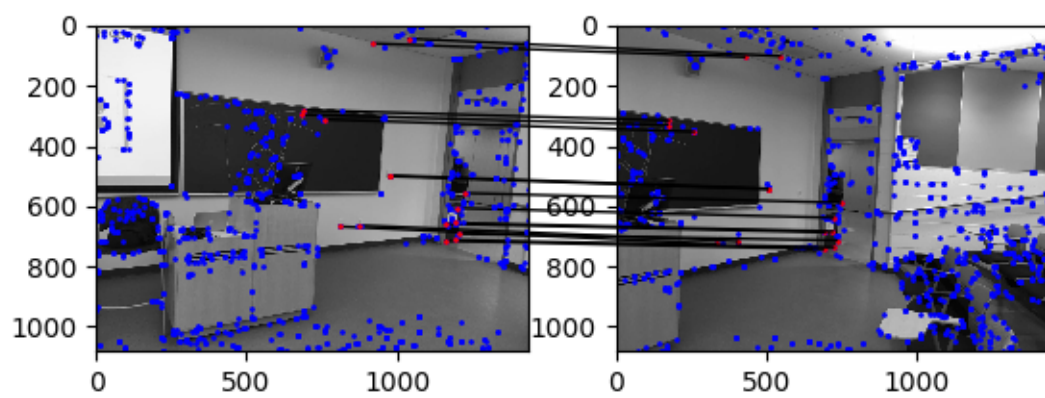


Figure 6: Final panorama

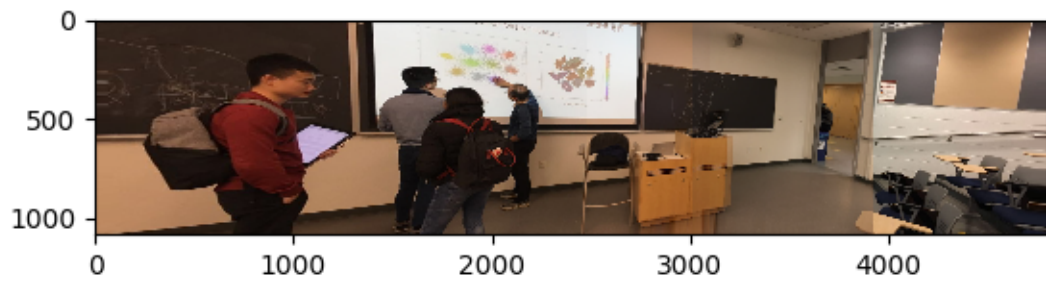


Figure 7: ANMS for the left image

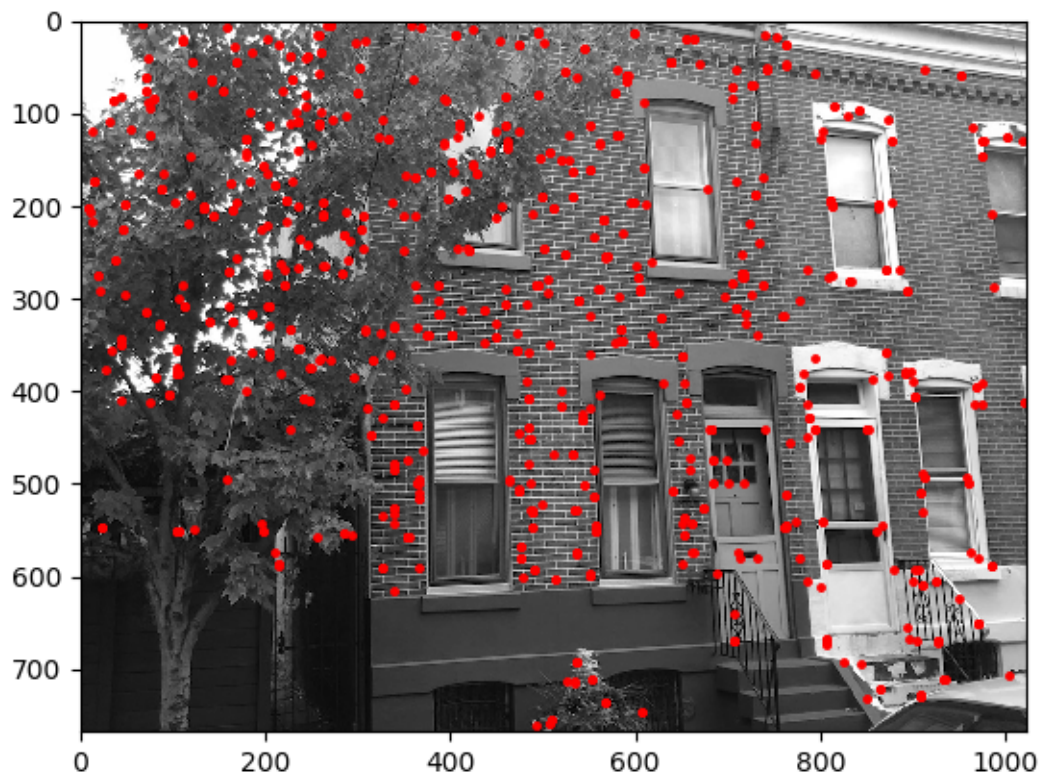


Figure 8: ANMS for the middle image

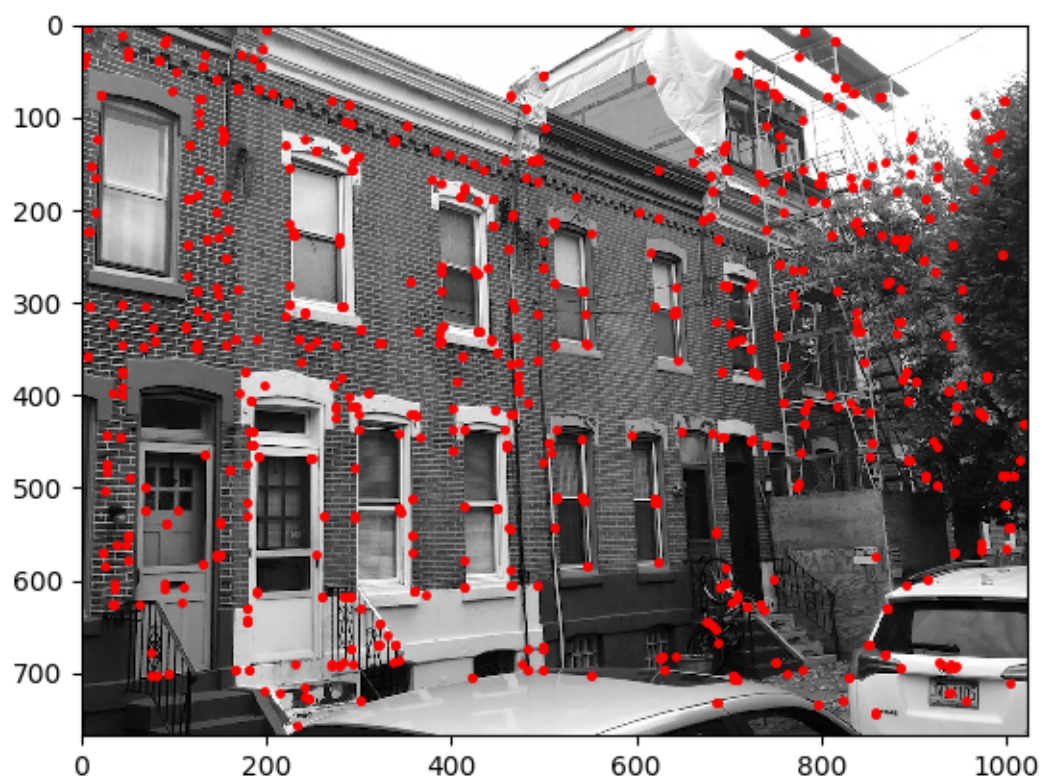


Figure 9: ANMS for the right image

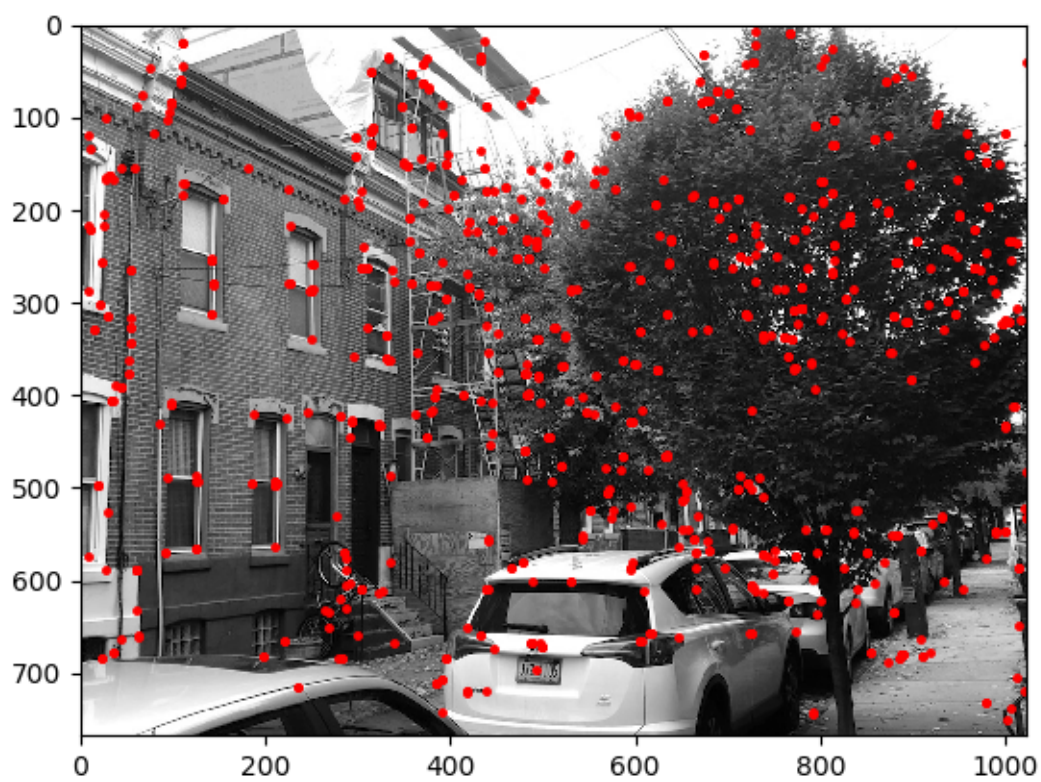


Figure 10: Post-RANSAC points using the left and middle images

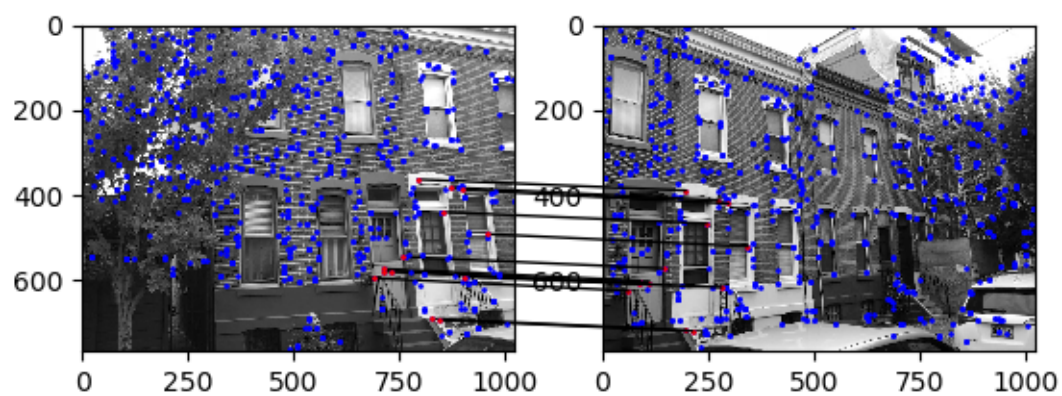


Figure 11: Post-RANSAC points using the middle and right images

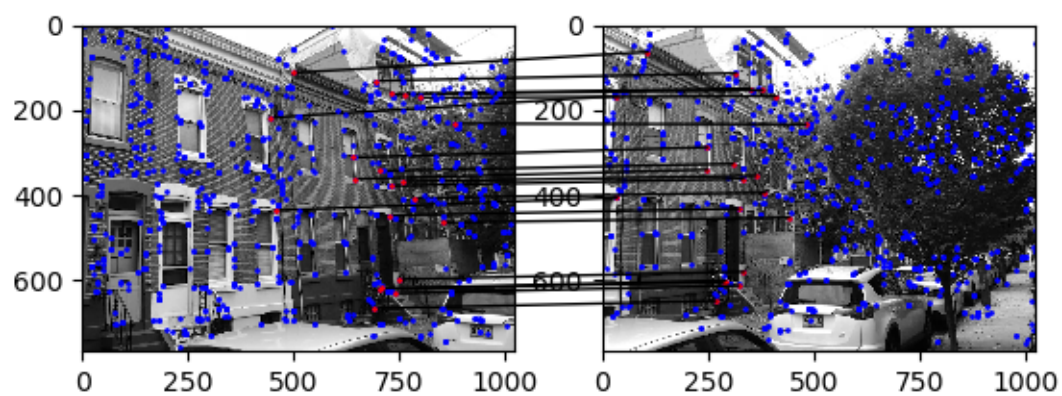


Figure 12: Final panorama

