CS180 Project 4 - Ryan Ren [illegible]

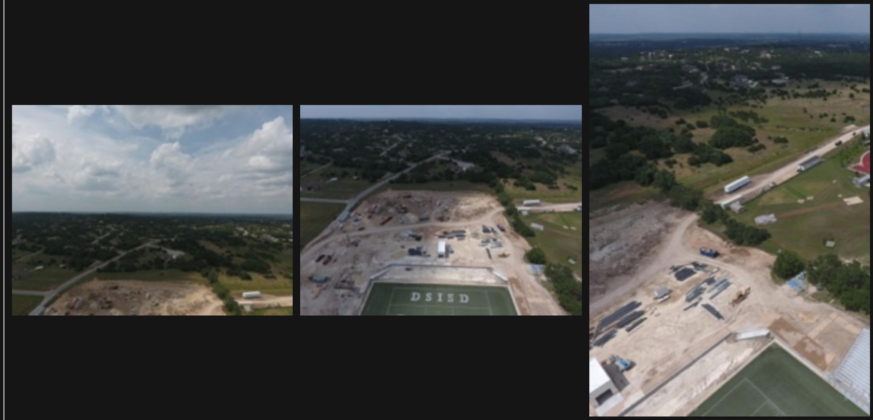
github: https://github.com/berkeleybear22ryan/CS180_Project4

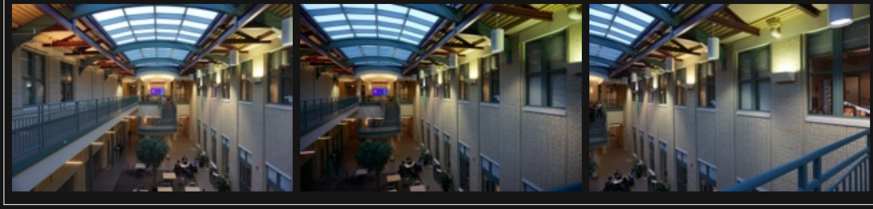
website: https://berkeleybear22ryan.github.io/CS180_Project4/

Part 1: Shoot and Digitize Pictures

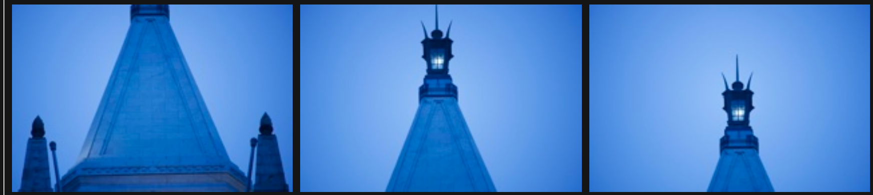
For this project, I took multiple sets of pictures [illegible] my own images [illegible] The images [illegible] homographies [illegible] work with homographies and mosaic

For the sets I worked with:





Here are the personal image sets that I took:



Part 2: Recover Homographies

Homography [illegible] manually [illegible] corresponding points [illegible] `code/points/` directory. The homography [illegible] `computeH` function [illegible] compute the homography [illegible] least-squares [illegible] transformation m[illegible] `code/h_matrix/`s stored under

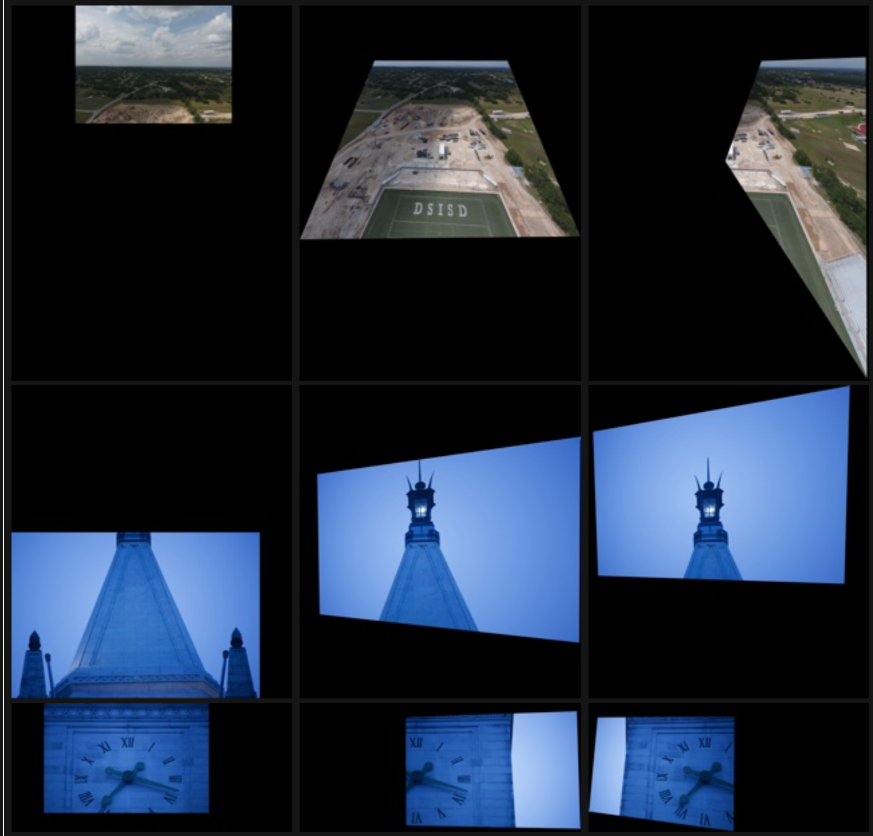
Example of points visualization:

Homographies for image sets:

- `code/h_matrix/1me/H_IMG_6786_to_IMG_6783.txt`
- `code/h_matrix/1me/H_IMG_6792_to_IMG_6783.txt`
- `code/h_matrix/9/H_002_to_001.txt`
- `code/h_matrix/9_5/H_002_to_001.txt`
- `code/h_matrix/11/H_003_to_001.txt`

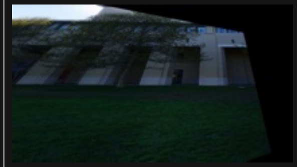
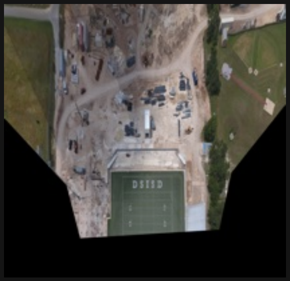
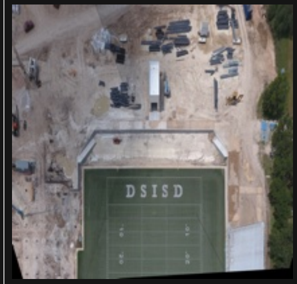
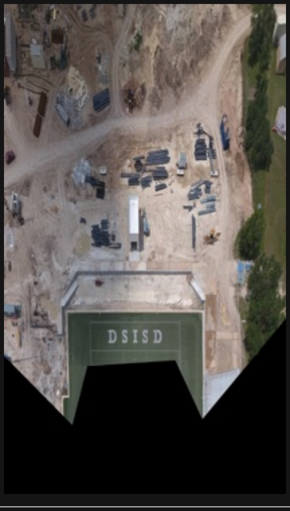
Part 3: Warp the Images

OnctehheomogrwaephrèecsvlesedletmwartphiemagTehseararpwiandsgonuesiimngvenaspepwihgnçahpesaphixferlotmoeutbpaudtohienpiumtaTghessaepbisnovobliveadmterptoleastaimdpelievealltueomon-incdegetThweaepiendagyessavuenddtel `code/output/` folderach set of images.



Part 4: Image Rectification

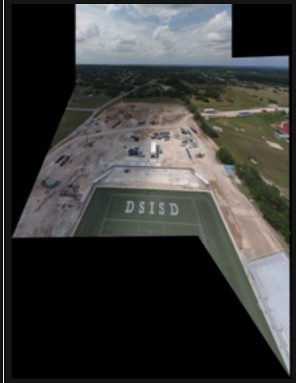
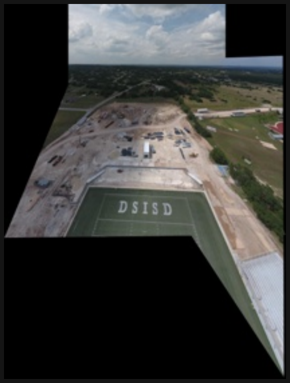
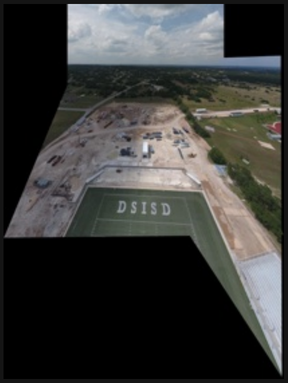
[illegible] `code/rectify/` folder

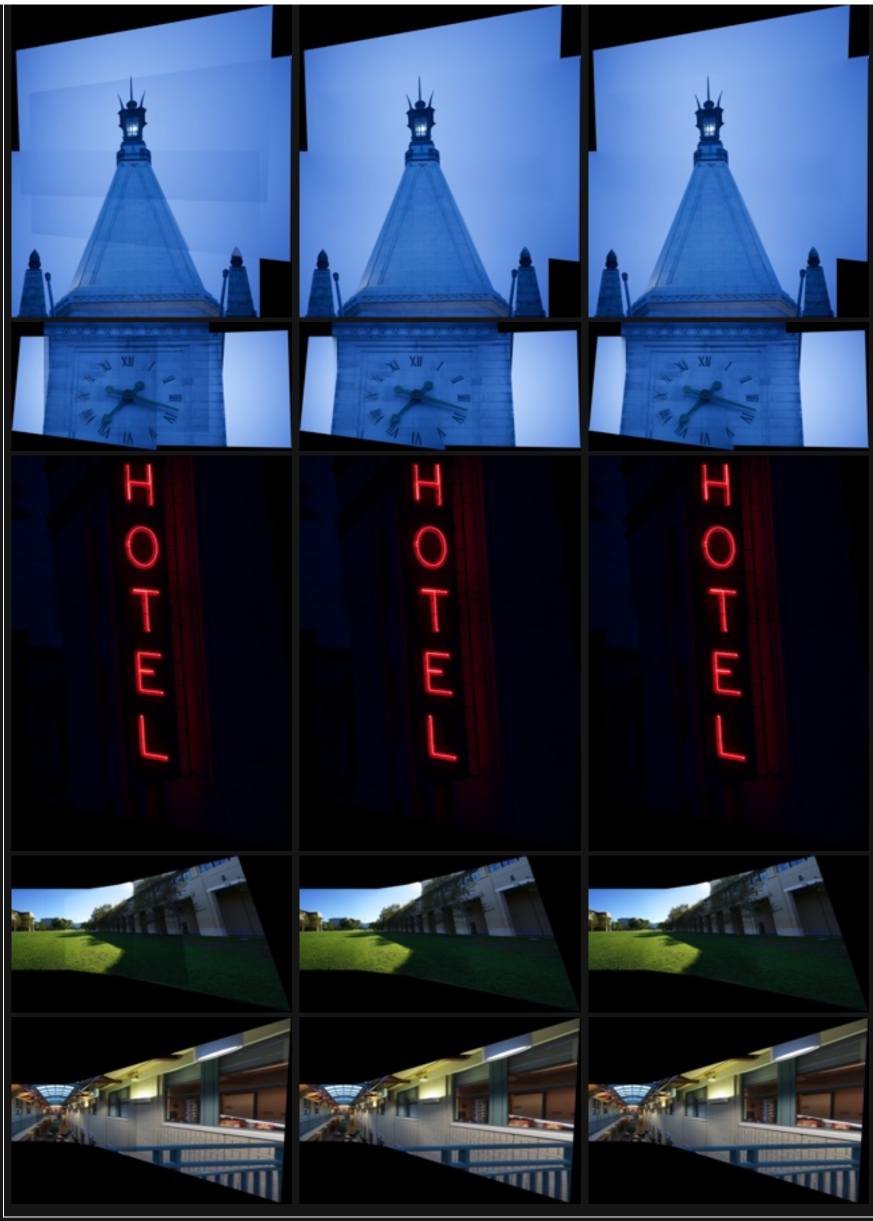





Part 5: Blend the Images into a Mosaic

In the final step, I [illegible] between images, I comput[illegible]

I implemented both basic weighted averagin[illegible] `code/output/` [illegible] transitions.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