Project 2:

Updated on Mar.16th

To run this project:

```
conda env create -f environment.yaml
source activate cv-project2
Python Project2.py
```

You may load the full description from **Project2.html** The result image is saved under directory ./results Since the Project is primarly completed with Jupytor Notebook. For better interactive result, you may use Jupytor Notebook to render this project.

```
jupyter Project2.ipynb
```

Stereo Matching Result

- With a few tests of gaussian sigma peremeter, the best result is achieved by 0.75, with RMS distance of 12.7824466742
- With a few tests of bilateral peremeter,the best result is achieved by d=10, sigmaColor=3, sigmaSpace=3: 13.1280188273
- After left-right consistency check, the RMS value is 9.6487828026

Note: The RMS value in left-right consistency check does not include the occluded points.

Panorama stitching using homographies Result

- The best homography matrix is:

[[9.50102773e-01 -1.08936452e-02 3.62685882e+02]

[6.79549185e-02 9.87803781e-01 2.40705622e+01]

[-1.42737010e-15 2.68156690e-16 1.00000000e+00]]