

CSCI 5561 (Computer Vision)

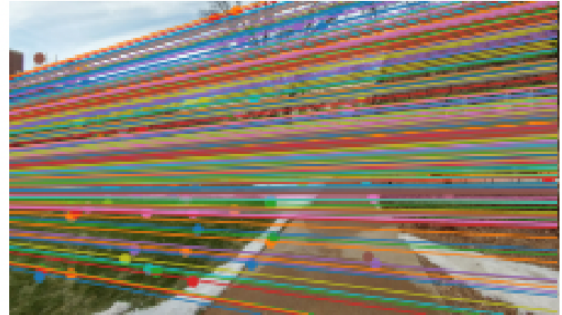
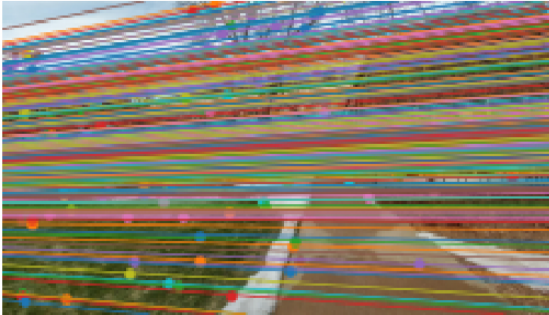
Homework 5 Summary

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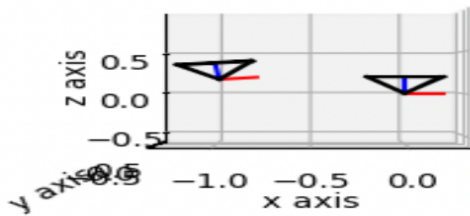
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1. Fundamental Matrix Computation - Computed the fundamental matrix using the 8-point algorithm within RANSAC. The number of ransac iterations are 1000 and the threshold is 0.05. Below is the visualization of the epipolar lines.

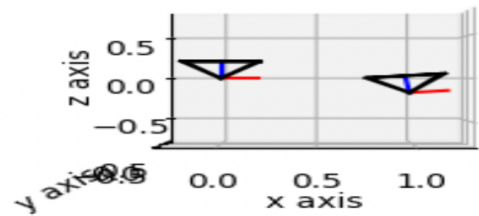


2. Compute Camera Poses - Below is the 3D visualization of the four configurations.

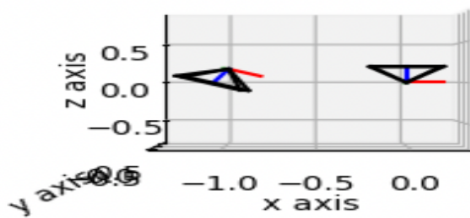
Configuration 0



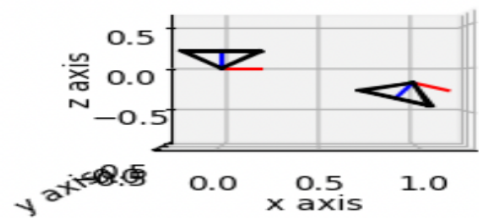
Configuration 1



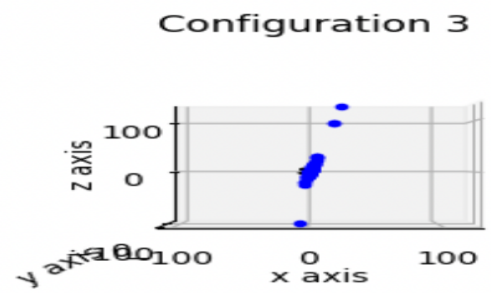
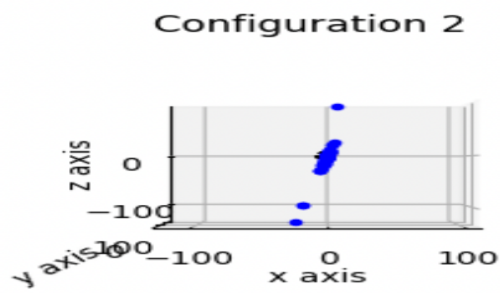
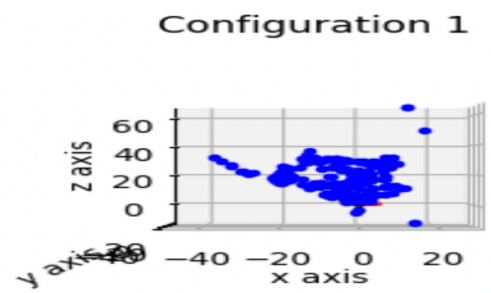
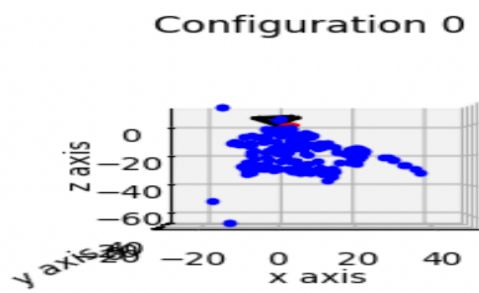
Configuration 2



Configuration 3



3. Triangulation - 3D points are reconstructed using linear triangulation method given the camera poses and correspondences. Below is the visualization of reconstructed 3D points.



4. Stereo rectification - After finding the best camera pose rectification matrix is calculated



5. Stereo Match - Disparity Map is computed

