

CPSC425 A4

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Q3: Sift threshold = 0.40:



Sift threshold = 0.60:



Sift threshold = 0.70:



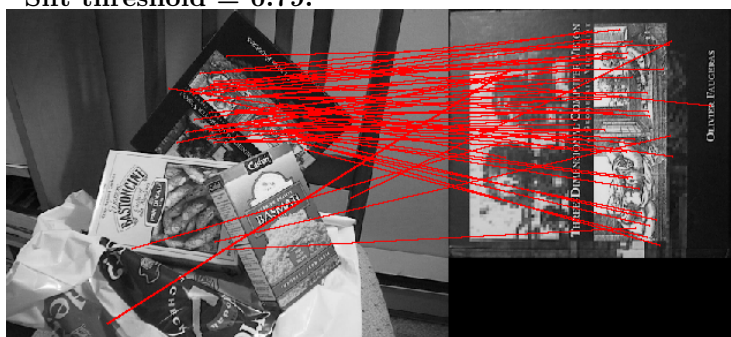
Sift threshold = 0.75:



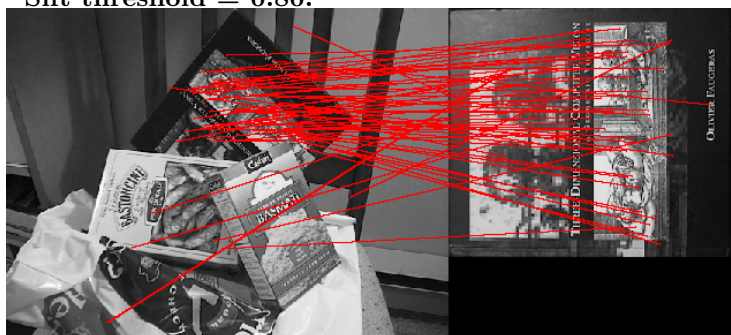
Sift threshold = 0.78:



Sift threshold = 0.79:



Sift threshold = 0.80:



Outlier selection:

Threshold = 0.4 we have one outlier in middle

Threshold = 0.6 we have one obvious outlier from edge of rice box to trees

Threshold = 0.7 another obvious outlier on corner of chair

Threshold = 0.75 3 more outliers, 2 on bag (parallel), other on corner of black book

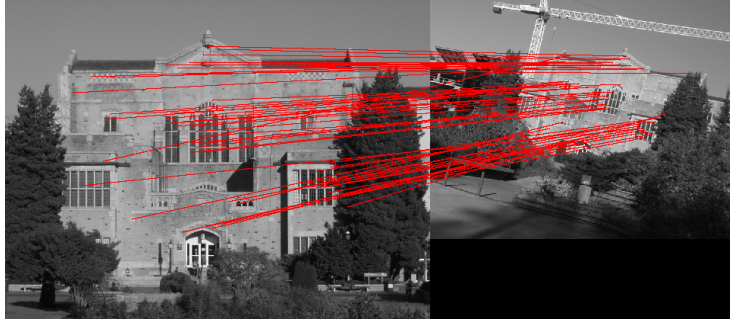
Threshold = 0.78 another on edge of bag

Threshold = 0.79 1 outlier on bottom of rice box

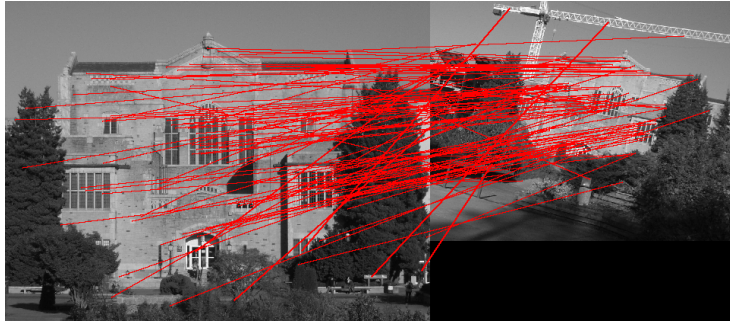
Threshold = 0.8 2 outliers, 1 on chair, 1 in middle of rice box

A threshold of 0.79 produced the best results while not having more than 10 obvious outliers. It was somewhat important to get the value correct since small increases to the threshold would add many outliers quickly after the ideal threshold

Q4:
With Ransac



No Ransac



Best solution was found with SIFT Threshold of 0.78, 0.39 for the orientation threshold, and 0.40 for the scale threshold. The consistency checking allowed us to have more consistent outputs and use higher thresholds in general.