ETH zürich | D INFK

November 1, 2018

Computer Vision

Lab 04: RANSAC

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1 Line fitting with RANSAC

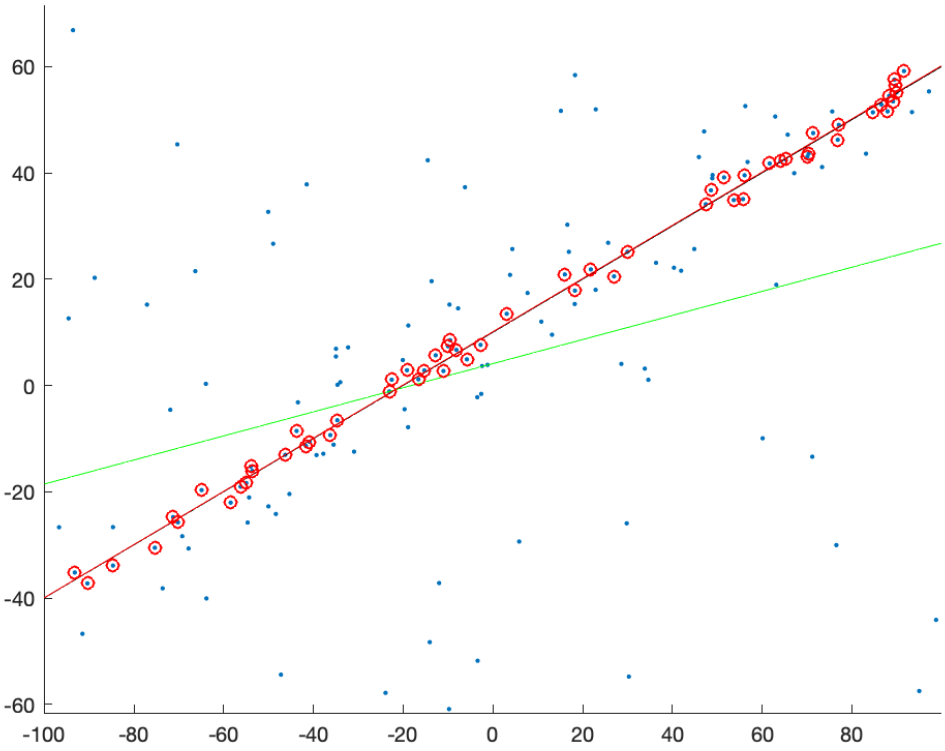

Figure 1. The regressed line with outliers/inliers

	Real	Least Square	RANSAC
Error	38.6475	125.6927	39.1906

Table 1. Errors from both the methods

2 Fundamental matrix

Figure 2. Epipolar lines for F

Figure 3. Epipolar lines for F

Figure 4. Epipolar lines for $\hat{F}$

Figure 5. Epipolar lines for $\hat{F}$

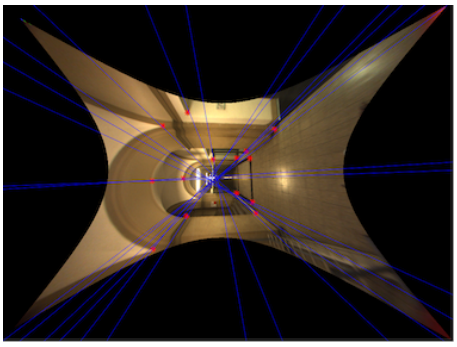

Figure 6. Epipolar lines for F

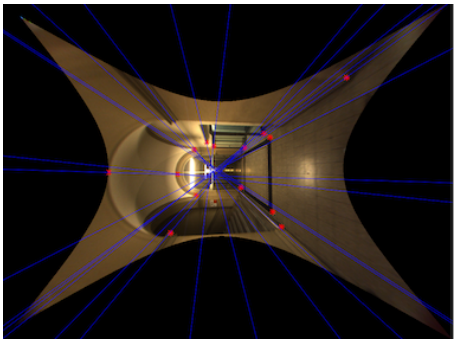

Figure 7. Epipolar lines for F

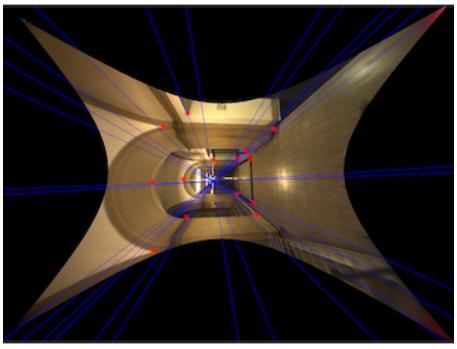

Figure 8. Epipolar lines for $\hat{F}$

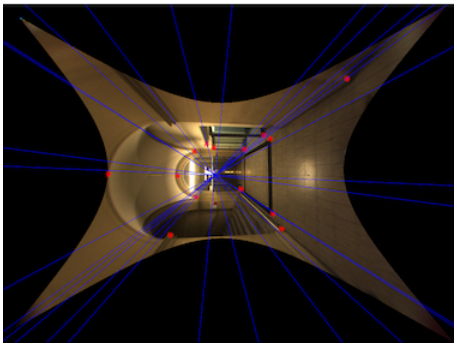

Figure 9. Epipolar lines for $\hat{F}$

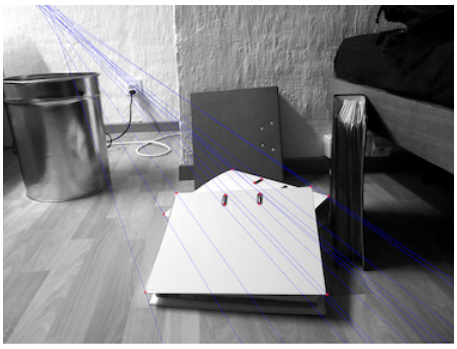

Figure 10. Epipolar lines for F

Figure 11. Epipolar lines for F

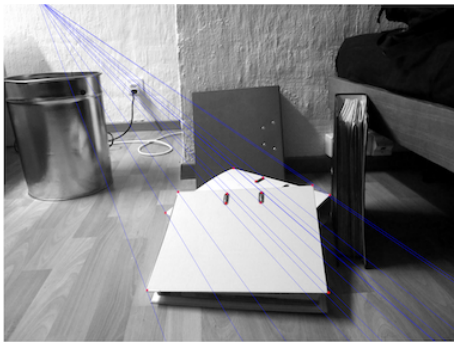

Figure 12. Epipolar lines for $\hat{F}$

Figure 13. Epipolar lines for $\hat{F}$

3 Essential matrix

Figure 14. Epipolar lines for $\hat{F}$

Figure 15. Epipolar lines for $\hat{E}$

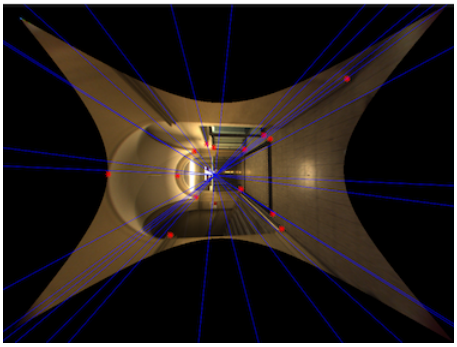

Figure 16. Epipolar lines for $\hat{F}$

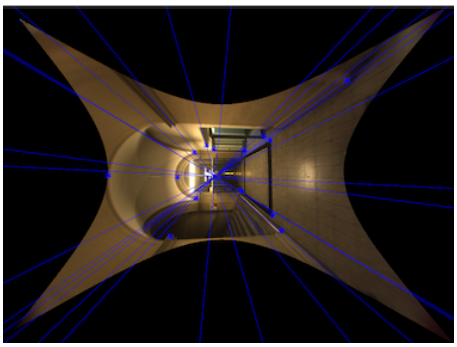

Figure 17. Epipolar lines for $\hat{E}$

Figure 18. Epipolar lines for $\hat{F}$

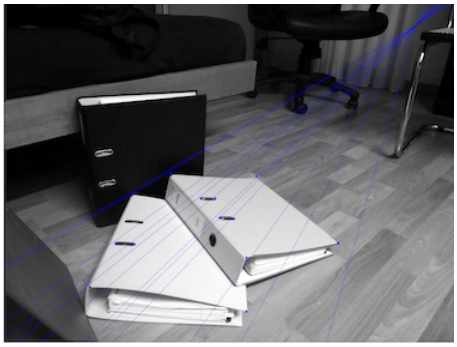

Figure 19. Epipolar lines for $\hat{E}$

4 Camera matrix

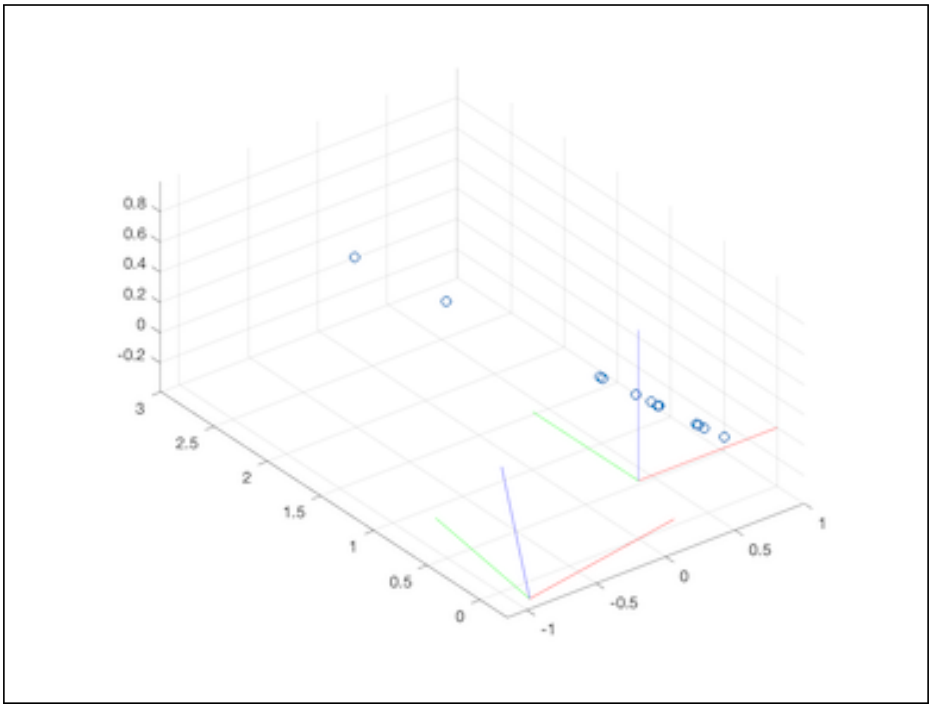

Figure 20. The 3D points in front of both cameras

5 SIFT

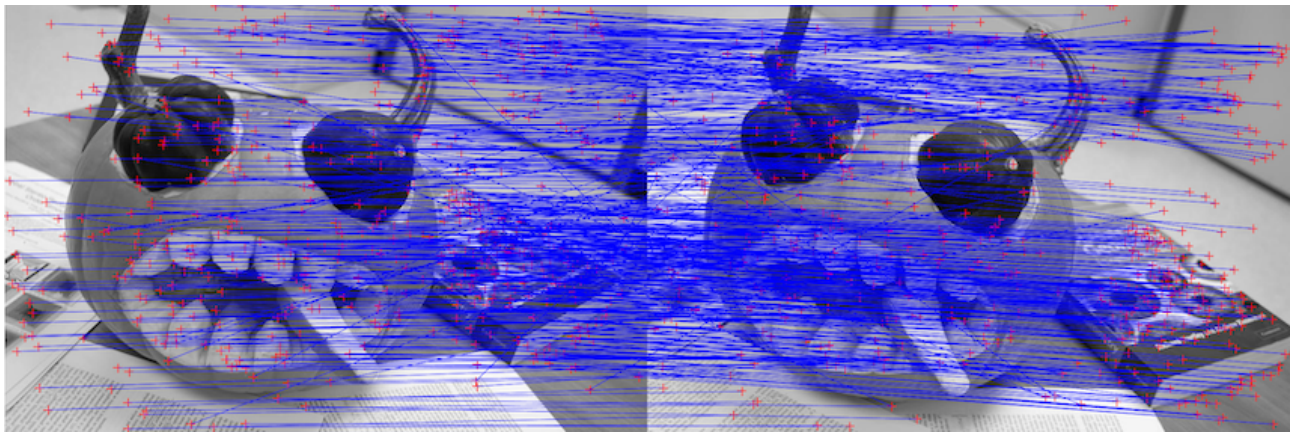

Figure 21. Features match with SIFT

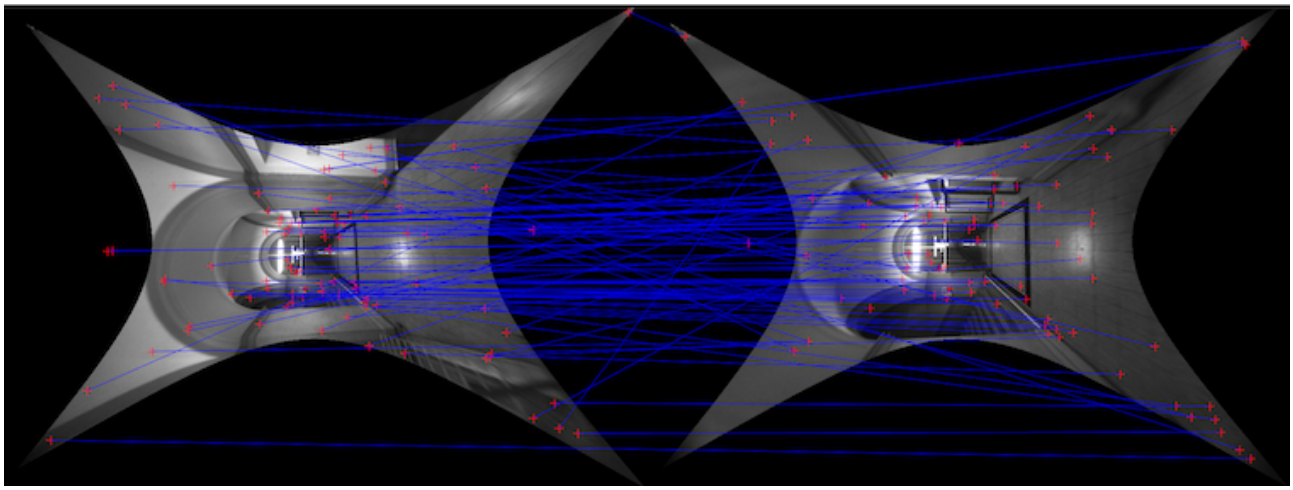

Figure 22. Features match with SIFT

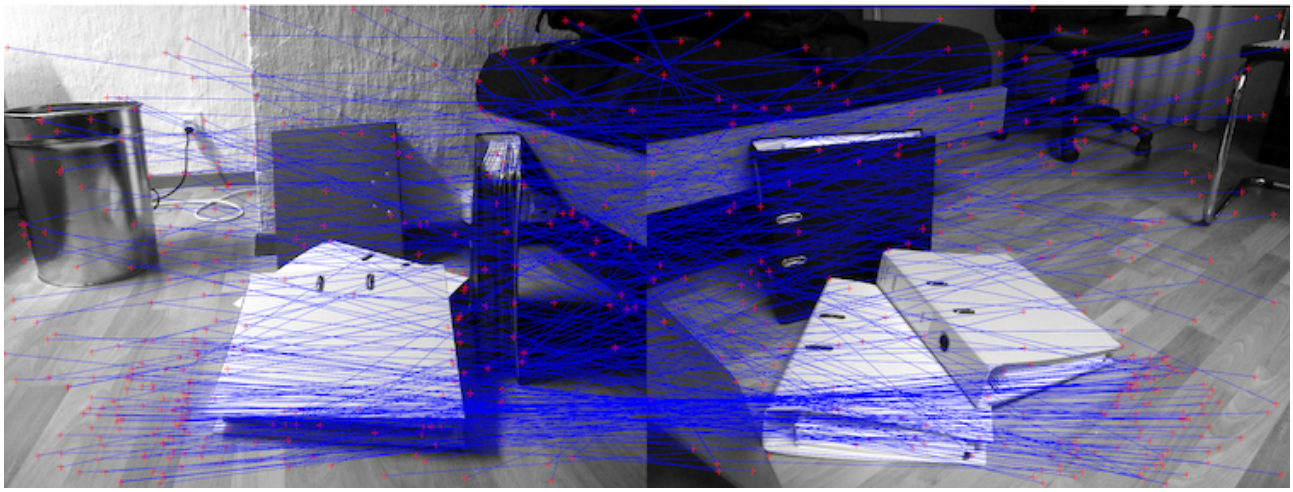

Figure 23. Features match with SIFT

6 8-Point RANSAC

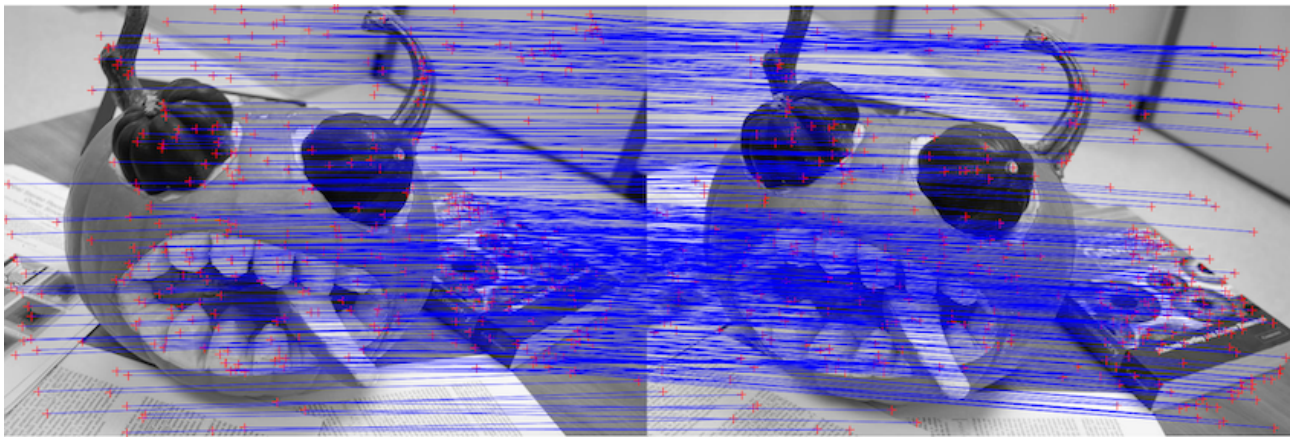

Figure 24. Inliers using Adaptive 8-Point RANSAC

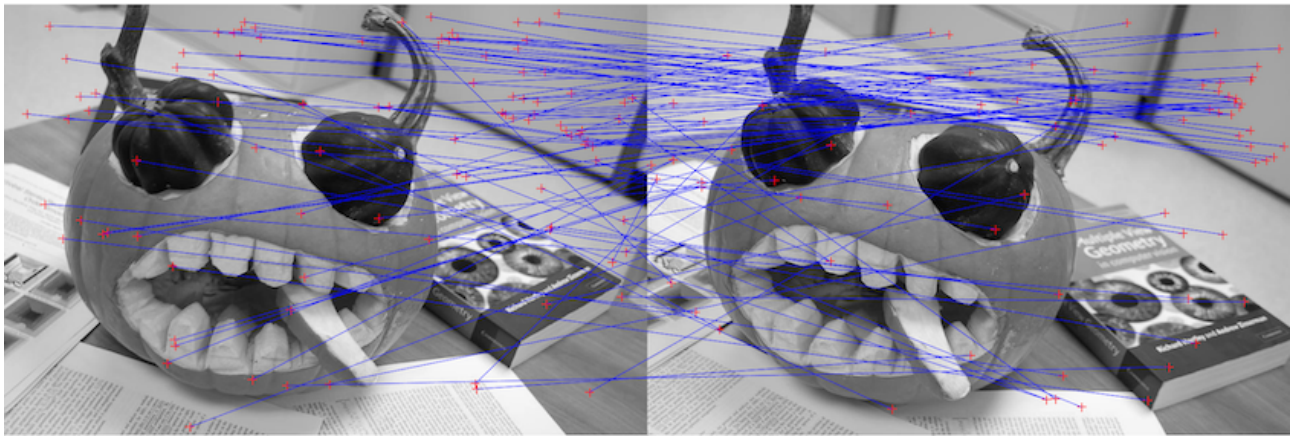

Figure 25. Outliers using Adaptive 8-Point RANSAC

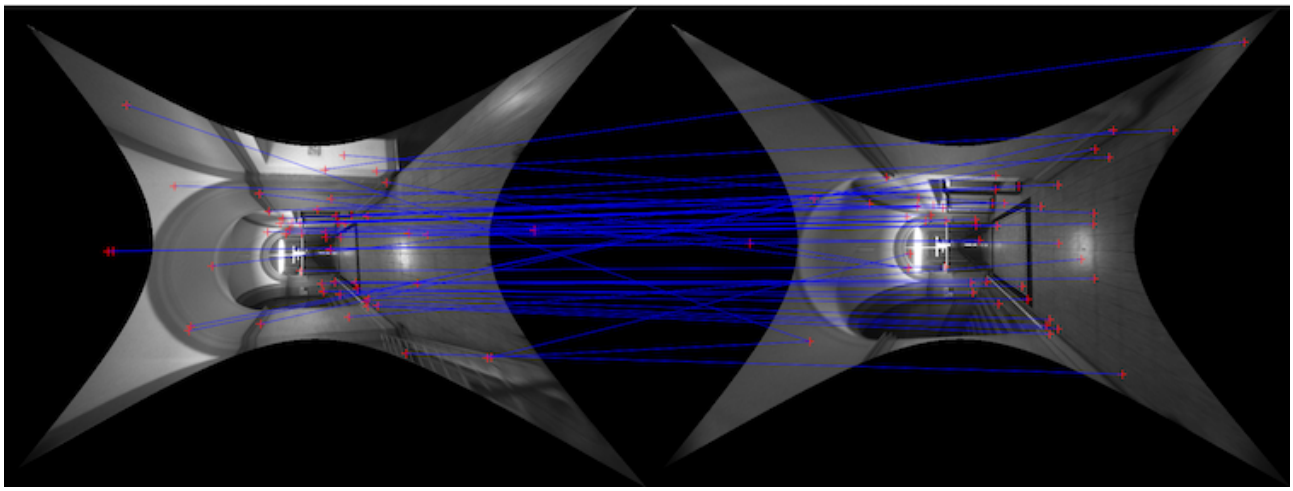

Figure 26. Inliers using Adaptive 8-Point RANSAC

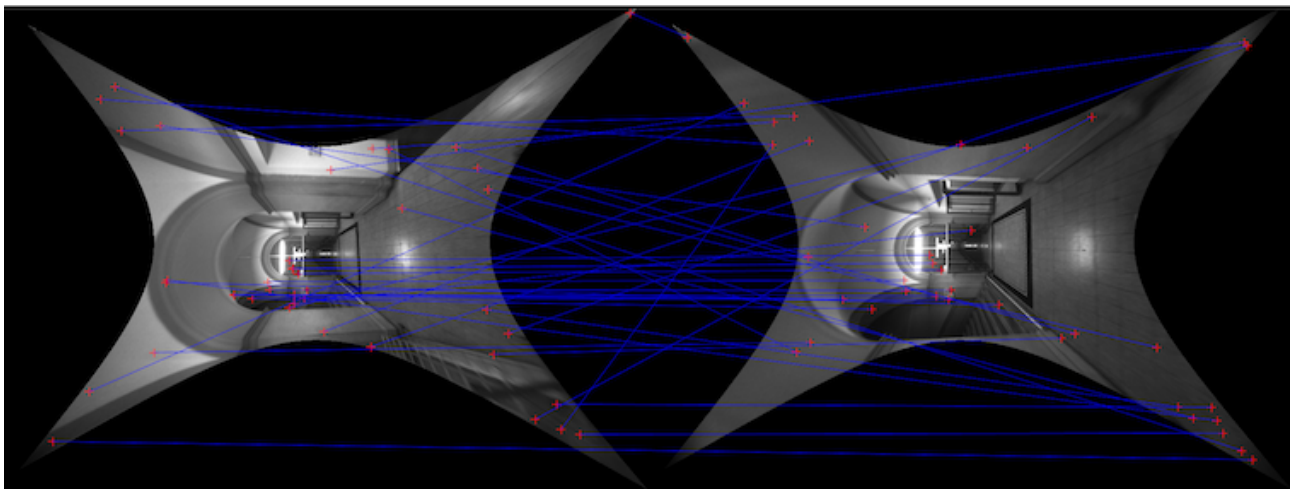

Figure 27. Outliers using Adaptive 8-Point RANSAC

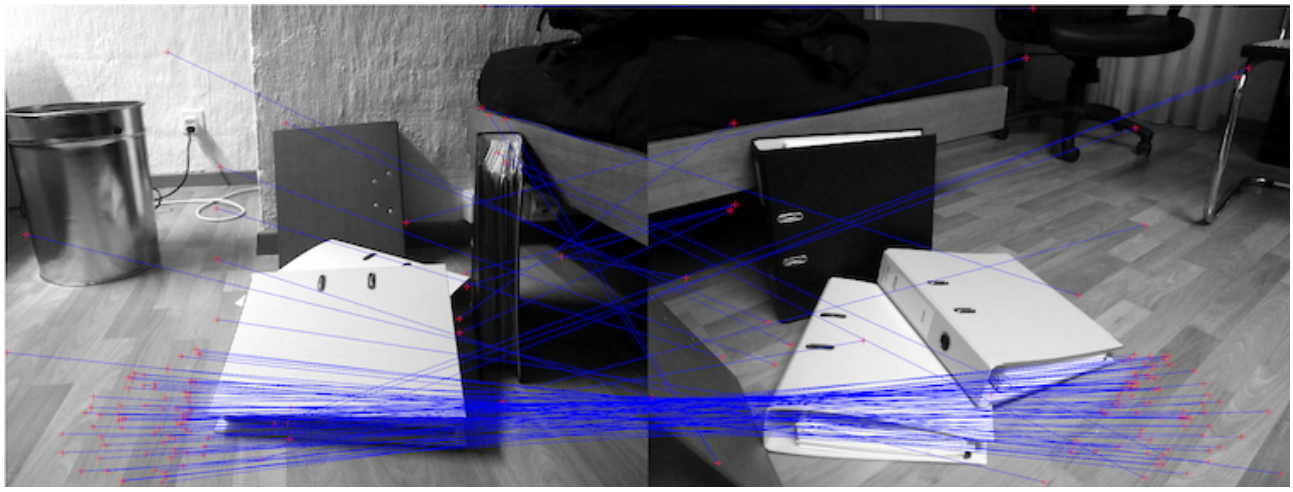

Figure 28. Inliers using Adaptive 8-Point RANSAC

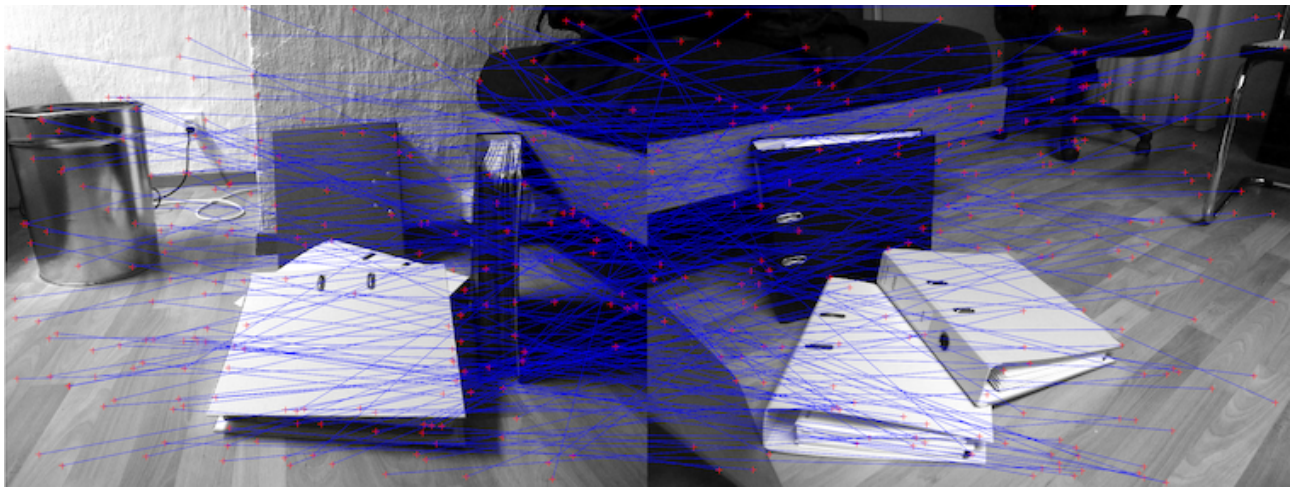

Figure 29. Outliers using Adaptive 8-Point RANSAC