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# Computer Vision: Exercise 4

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## 1 LINE FITTING WITH RANSAC

In Figure 1.1 are shown the fitted lines for the given points. The black line represents the real model, the green is the one fitted with the least squares and the red one is fitted with RANSAC. As we can see, RANSAC has performed very well, and also much better than least squares. This is because RANSAC only fits the model based on the inliers and thus is very robust to the outliers in comparison to the least squares. Error with RANSAC (with 73 inliers) was 691.2084 and with least squares was 681.0276. Lower error of least squares algorithm is expected since that is the objective that is directly minimized.

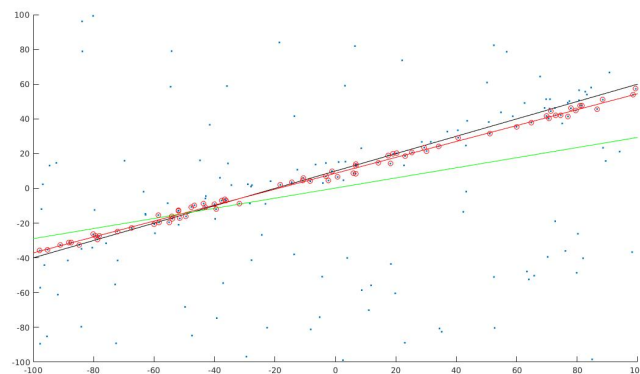


Figure 1.1: Line fitted with LS and RANSAC.

## 2 FUNDAMENTAL MATRIX