



# RANSAC

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🏷️ Tags	ComputerVision	Image Processing	Line Detection

## RANSAC (Random Sample Consensus)

### Problem:

- Dealing with Outliers!
  - eg. noise, unwanted points
  - resulting in invalid matches in model
  - if outliers < 50%, -> use RANSAC

### Algorithm

1. Randomly chose  $s$  samples.
  - $s$  is the minimum samples to fit a model.
  - Homography,  $s = 4$
  - Linear Line,  $s = 2$

2. Fit the model to the randomly chosen samples.
3. Count the number **M** of inliers that fit the model within error
4. Repeat 1-3 **N** times
5. Choose the model that has the largest inliers  
[\[https://youtu.be/EkYXjmiolBg\]](https://youtu.be/EkYXjmiolBg)