

# Chapter 1

## 1.1 Fitting a robust regression model using RANSAC

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**Algorithm 1:** RANdom SAmple Consensus (RANSAC) algorithm

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```
1 begin
2   repeat
3     Select a random number of examples to be inliers and fit the model;
4     Test all other data points against the fitted model and add those points
       that fall within a user-given tolerance to the inliers;
5     Refit the model using all inliers;
6     Estimate the error of the fitted model versus the inliers;
7   until the performance meets a certain user-defined threshold or if a fixed
       number of iterations was reached;
8 end
```

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