

# An Iterative Method For Removing Outliers From a Set of Values

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## 0.1 Abstract

In any given set of widely varying values, there is bound to be unwanted noise. This algorithm aims to clean up that noise by remove outliers and output the resulting set.

## 0.2 Algorithm

Below is a pseudocode representation of the algorithm.

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### Algorithm 1 Method

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1: Input
2:   va set of values
3:   ttotal iterations allowed
4:    $\Theta$ sensitivity threshold
5: Output
6:   V a set of values with outliers removed
7: procedure FINDMEDIAN(v)
8:    $t \leftarrow$  Total iterations
9:    $i \leftarrow 0$  : Current iterations
10:   $\Theta \leftarrow$  Outlier sensitivity
11:  while  $i < t$  do
12:     $sum \leftarrow \sum v$ 
13:     $mean \leftarrow \frac{sum}{lengthOf(v)}$ 
14:    for  $x$  in  $v$  do
15:      if  $x < mean * \Theta$  then
16:         $v \leftarrow remove(x)$ 
17:     $sort(v)$ 
18:     $i \leftarrow i + 1$ 
19:   $V \leftarrow v$ 
  return V

```

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