

Max Lord Period 3 Computer Vision

Brute Force

Number of Points

Seconds

5000
10000
15000
20000
25000
30000
35000
40000
45000
50000

1.318794
5.483122
12.010888
20.168053
32.755278
47.175199
63.944961
83.474907
106.251797
129.831769

N log N

Number of Points

Seconds

100000
200000
300000
400000
500000
600000
700000
800000
900000
1000000

0.902901
1.896136
3.147645
4.000239
5.327815
6.60919
7.503375
8.389098
10.585663
12.448751

N

Number of Points

Seconds

1000
2000
3000
4000
5000
6000
7000
8000
9000
10000

1.587
4.249
8.8
15.268
28.052
38.199
58.31
104.55
87.635
114.428

Map accesses taking too long

N Algorithm

Seconds

125
100
75
50
25
0

10000
8000
6000
4000
2000
0

Number of Points

Brute Force Algorithm

Seconds

125
100
75
50
25
0

10000
20000
30000
40000

Number of Points

N log N Algorithm

Seconds

125
100
75
50
25
0

200000
400000
600000
800000

Number of Points