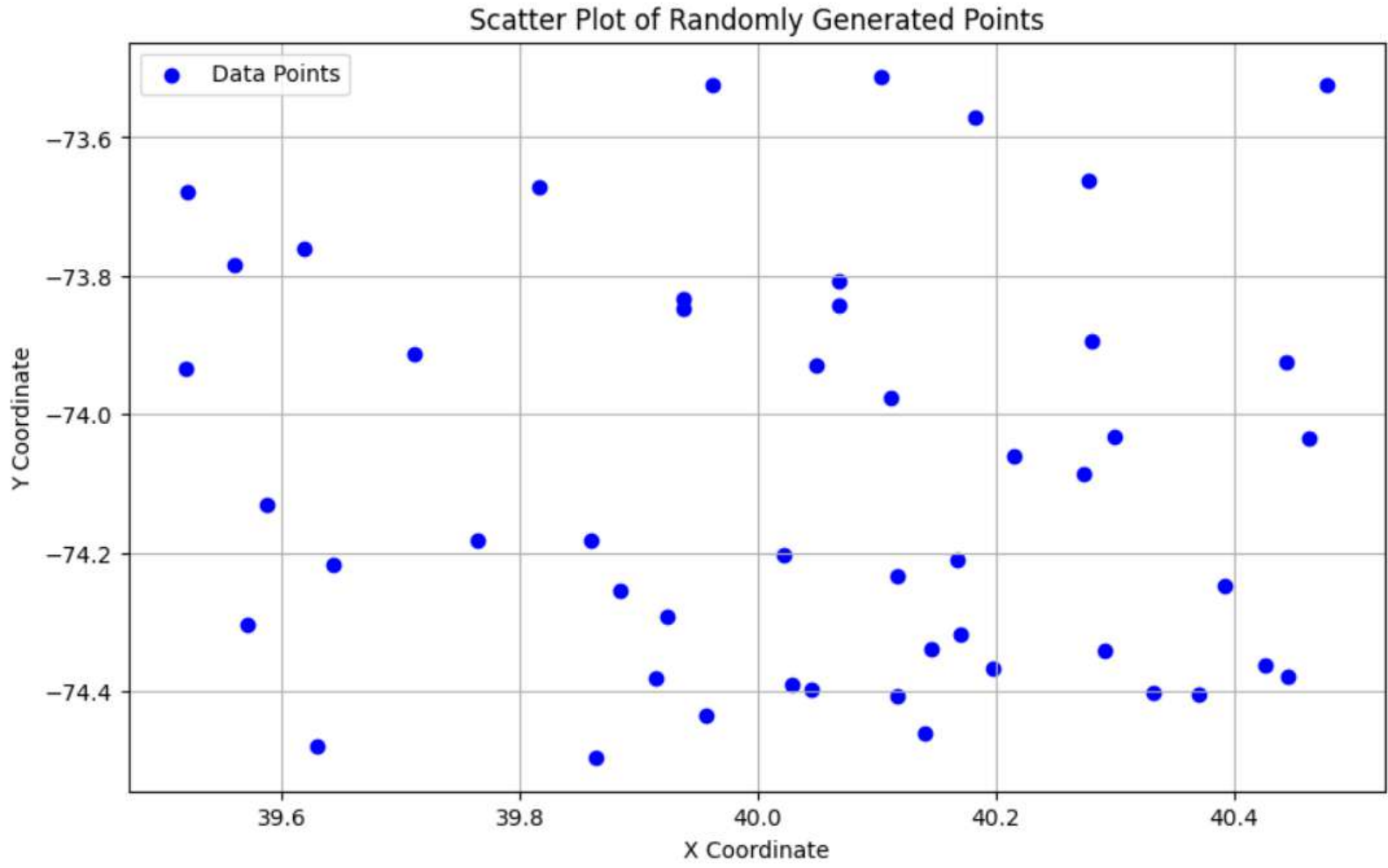
Scatter Plot of Randomly Generated Points
Data Points
−73.6
−73.8
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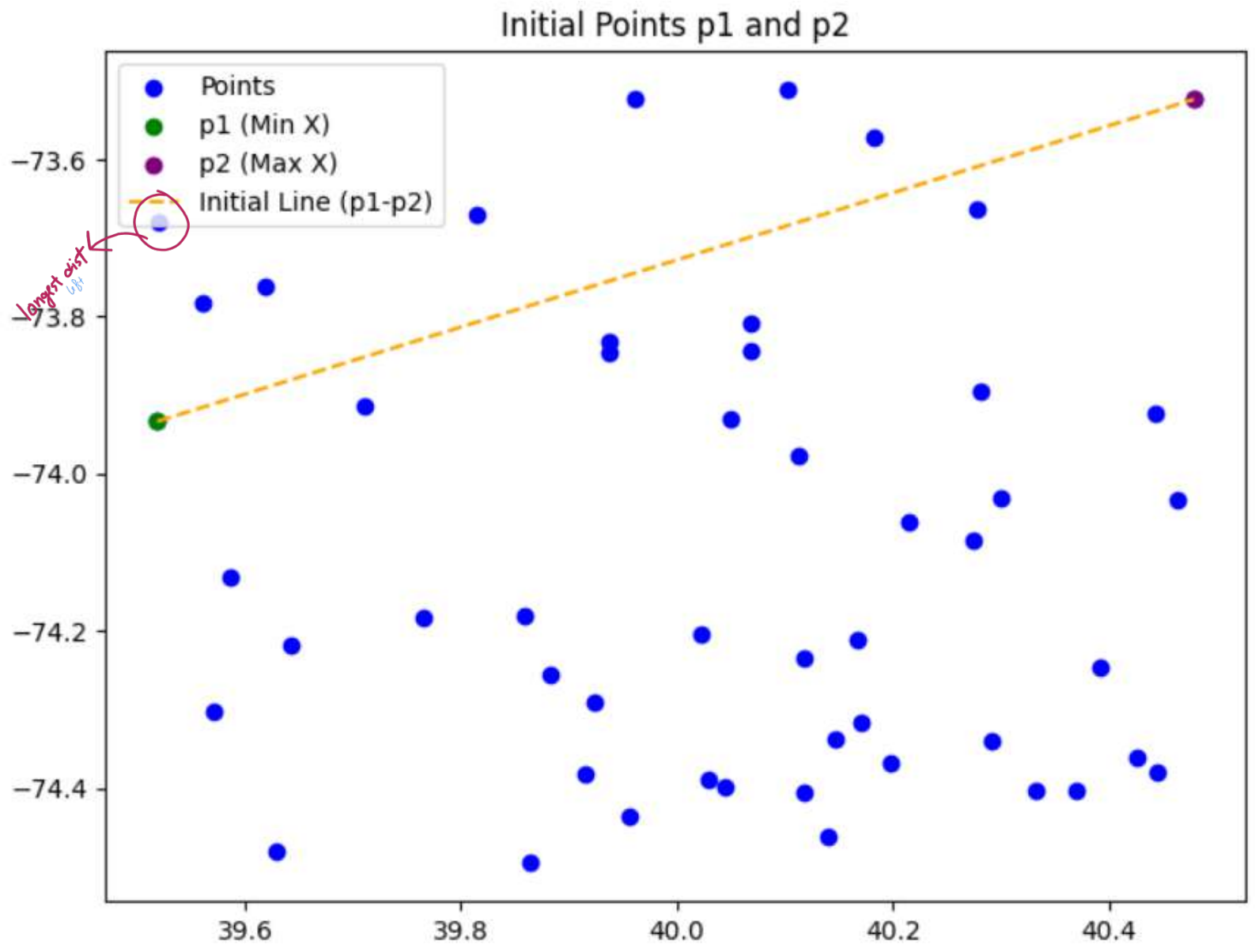
−74.2
−74.4
Y Coordinate
39.6
39.8
40.0
40.2
40.4
X Coordinate


Initial Points p1 and p2
Points
p1 (Min X)
p2 (Max X)
Initial Line (p1-p2)
longest dist
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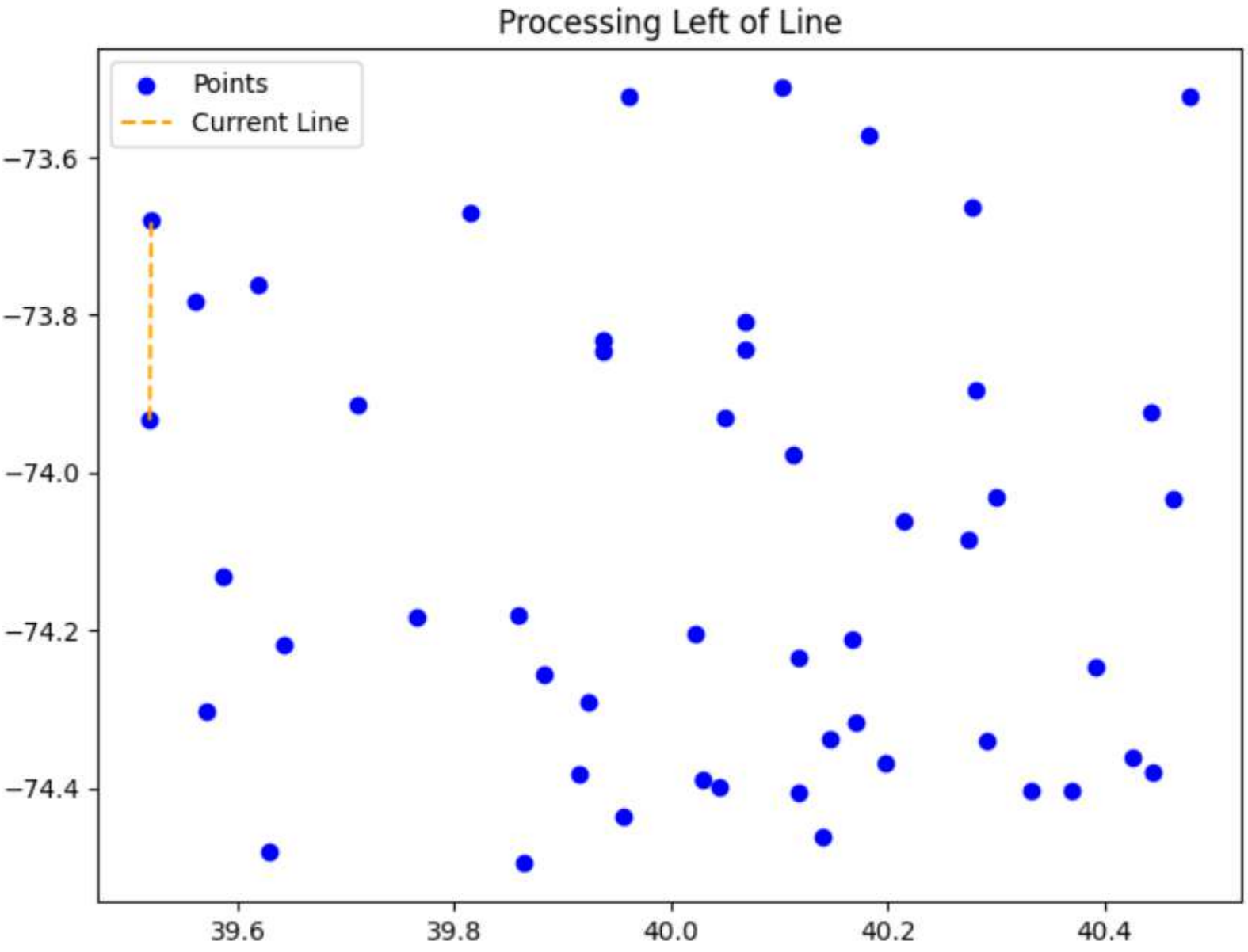
−73.8
−74.0
−74.2
−74.4
39.6
39.8
40.0
40.2
40.4


Processing Left of Line
Points
Current Line
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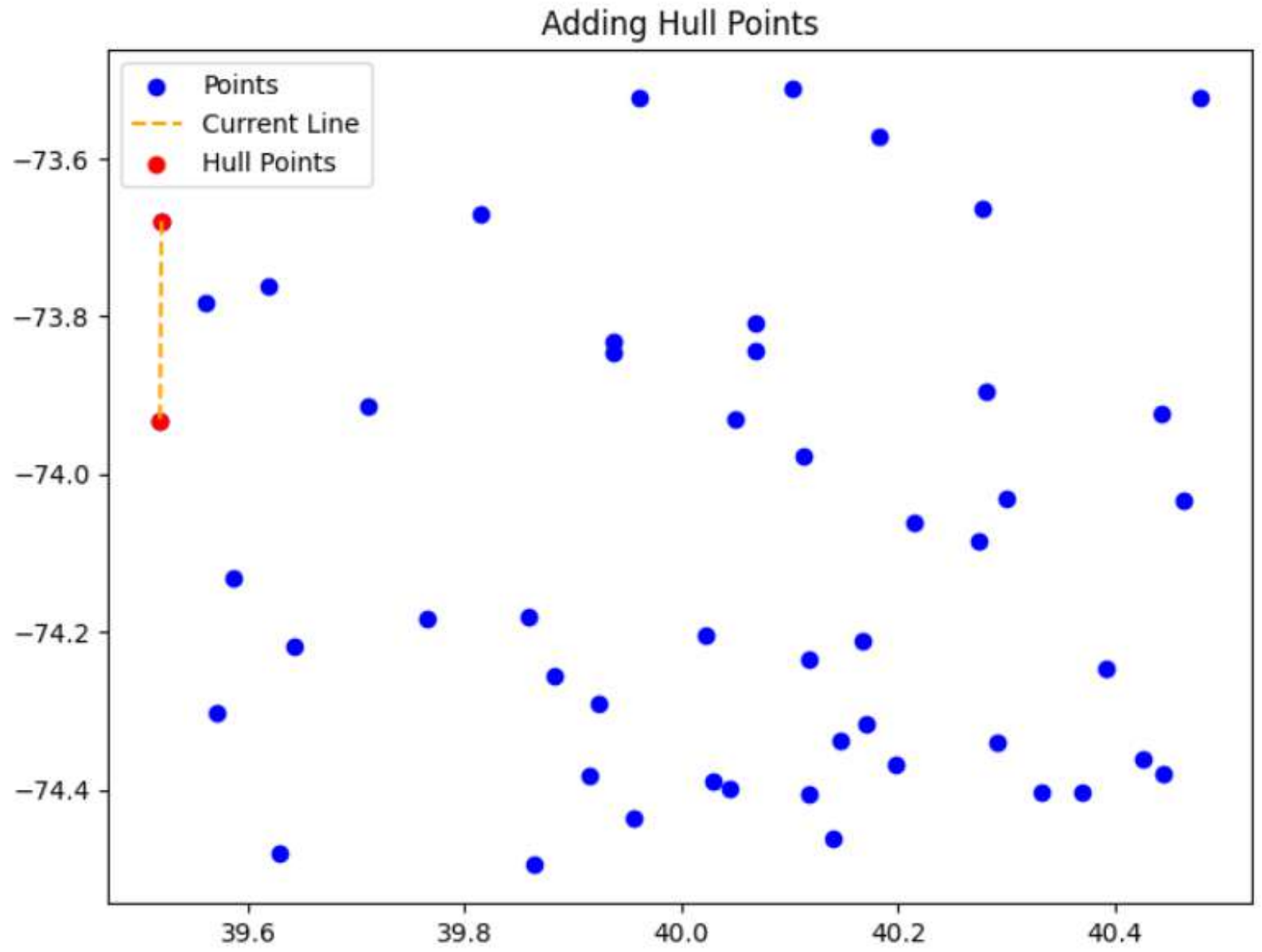
−74.0
−74.2
−74.4
39.6
39.8
40.0
40.2
40.4


Adding Hull Points
Points
Current Line
Hull Points
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−73.8
−74.0
−74.2
−74.4
39.6
39.8
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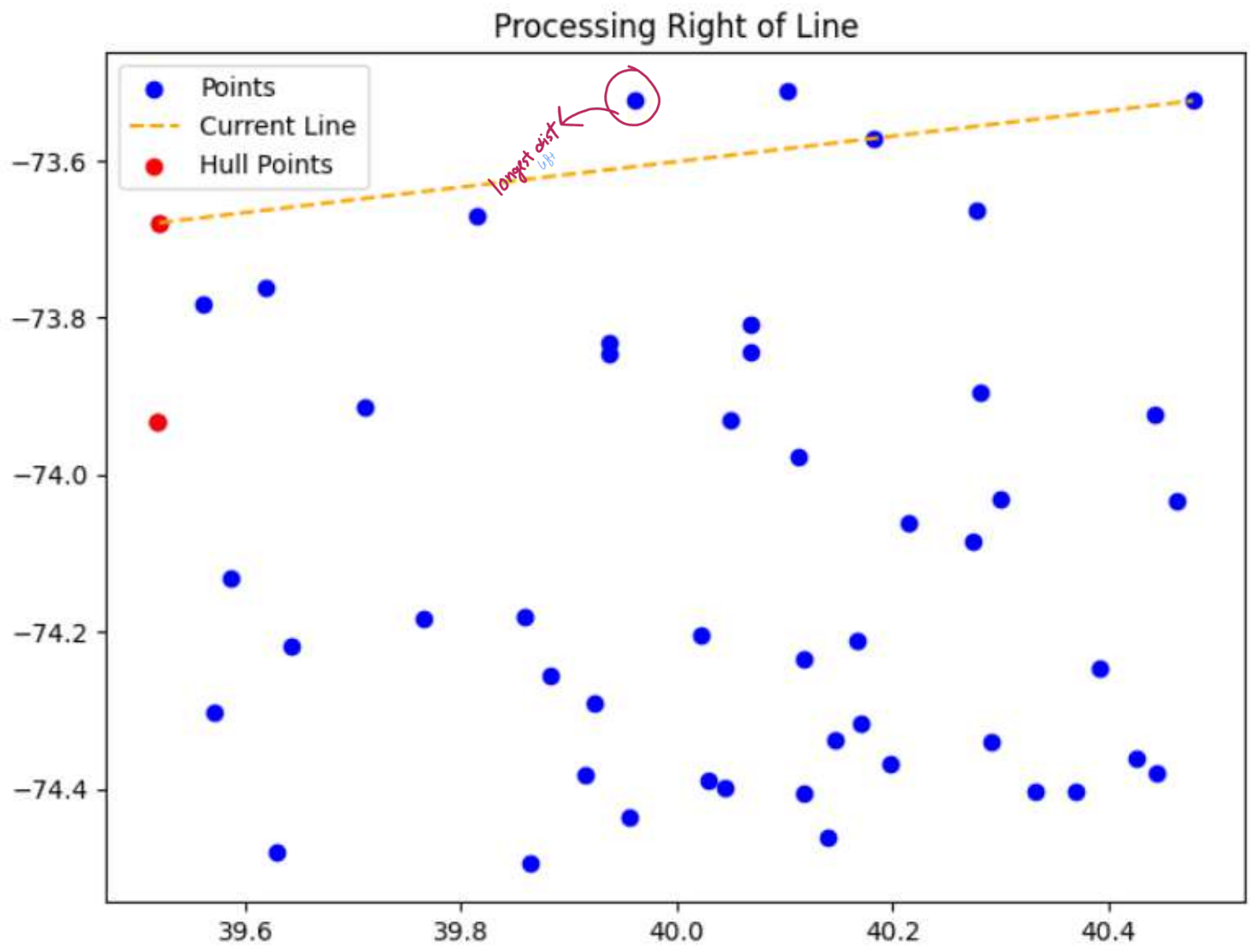
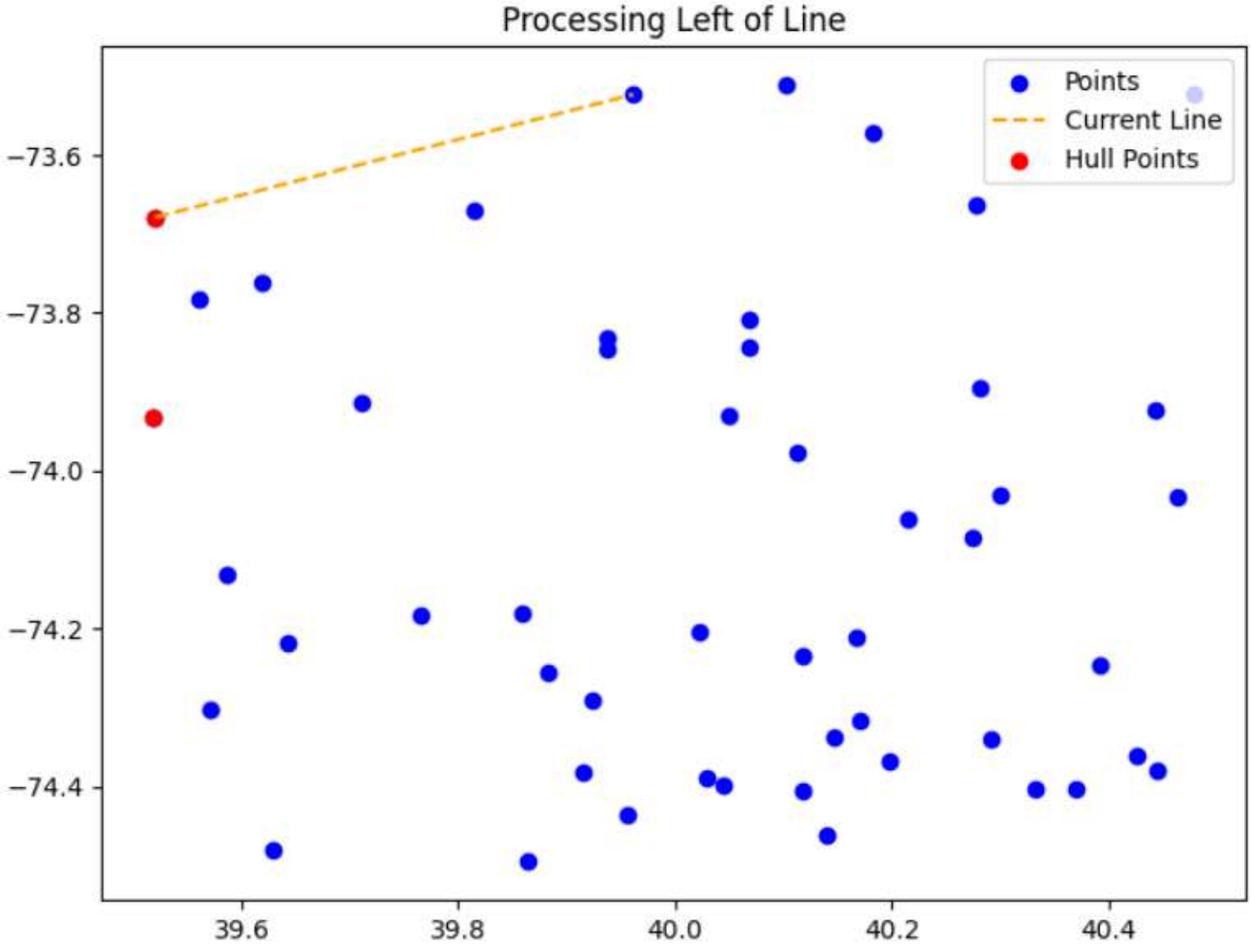
40.2
40.4


Processing Right of Line
Points
Current Line
Hull Points
longest dist
−73.6
−73.8
−74.0
−74.2
−74.4
39.6
39.8
40.0
40.2
40.4


Processing Left of Line
Points
Current Line
Hull Points
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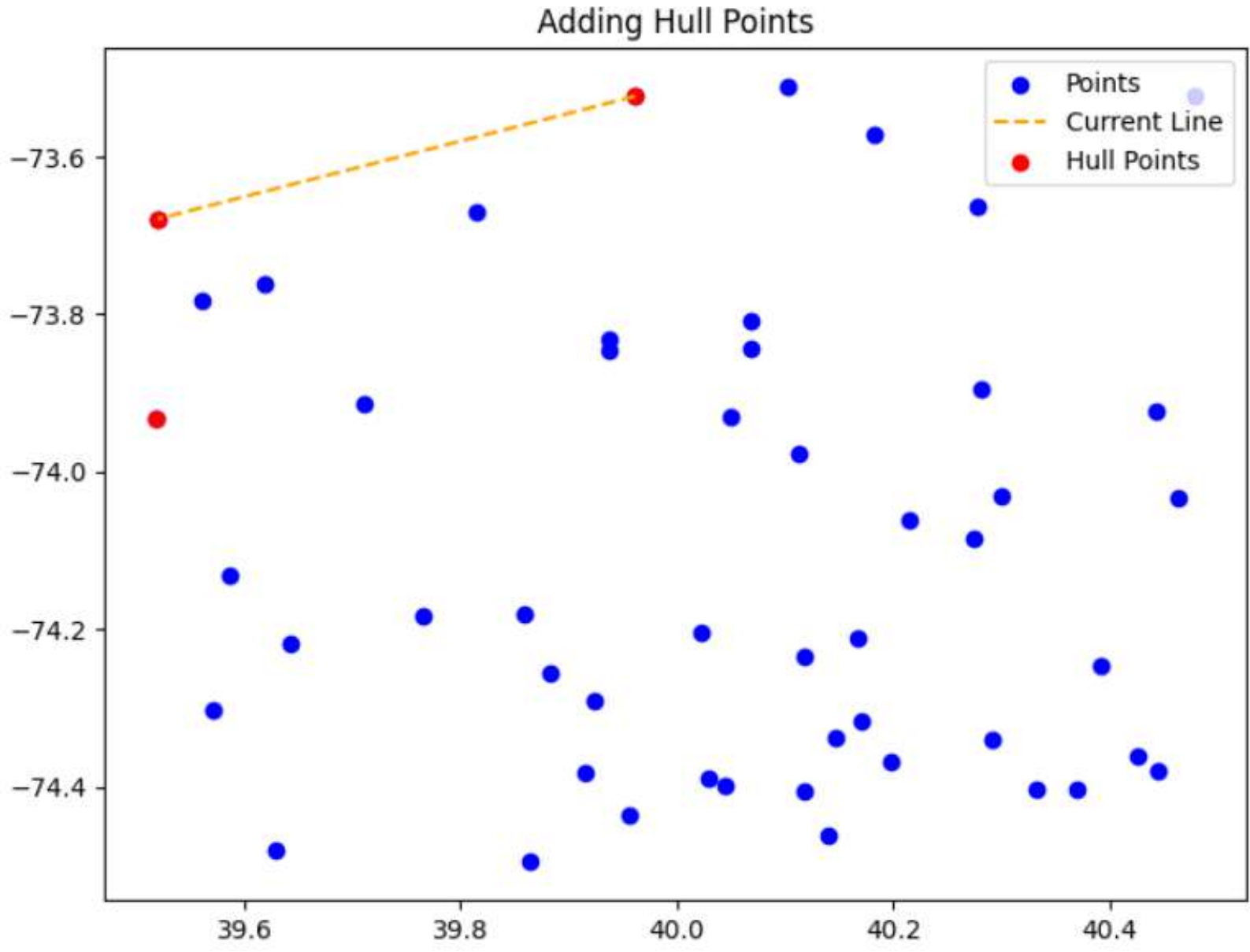
−73.8
−74.0
−74.2
−74.4
39.6
39.8
40.0
40.2
40.4


Adding Hull Points
Points
Current Line
Hull Points
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−74.2
−74.4
39.6
39.8
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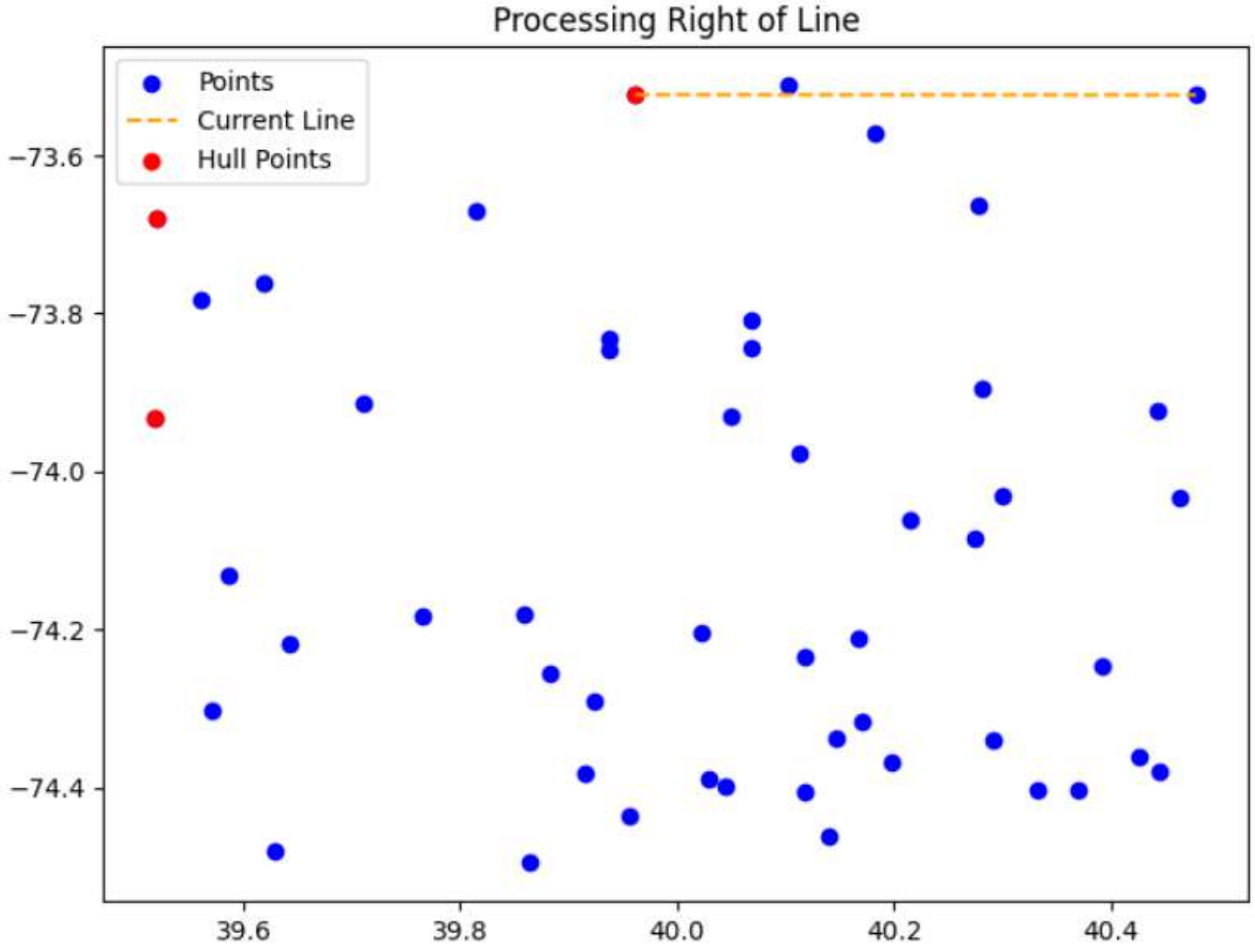
40.4


Processing Right of Line
Points
Current Line
Hull Points
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−74.2
−74.4
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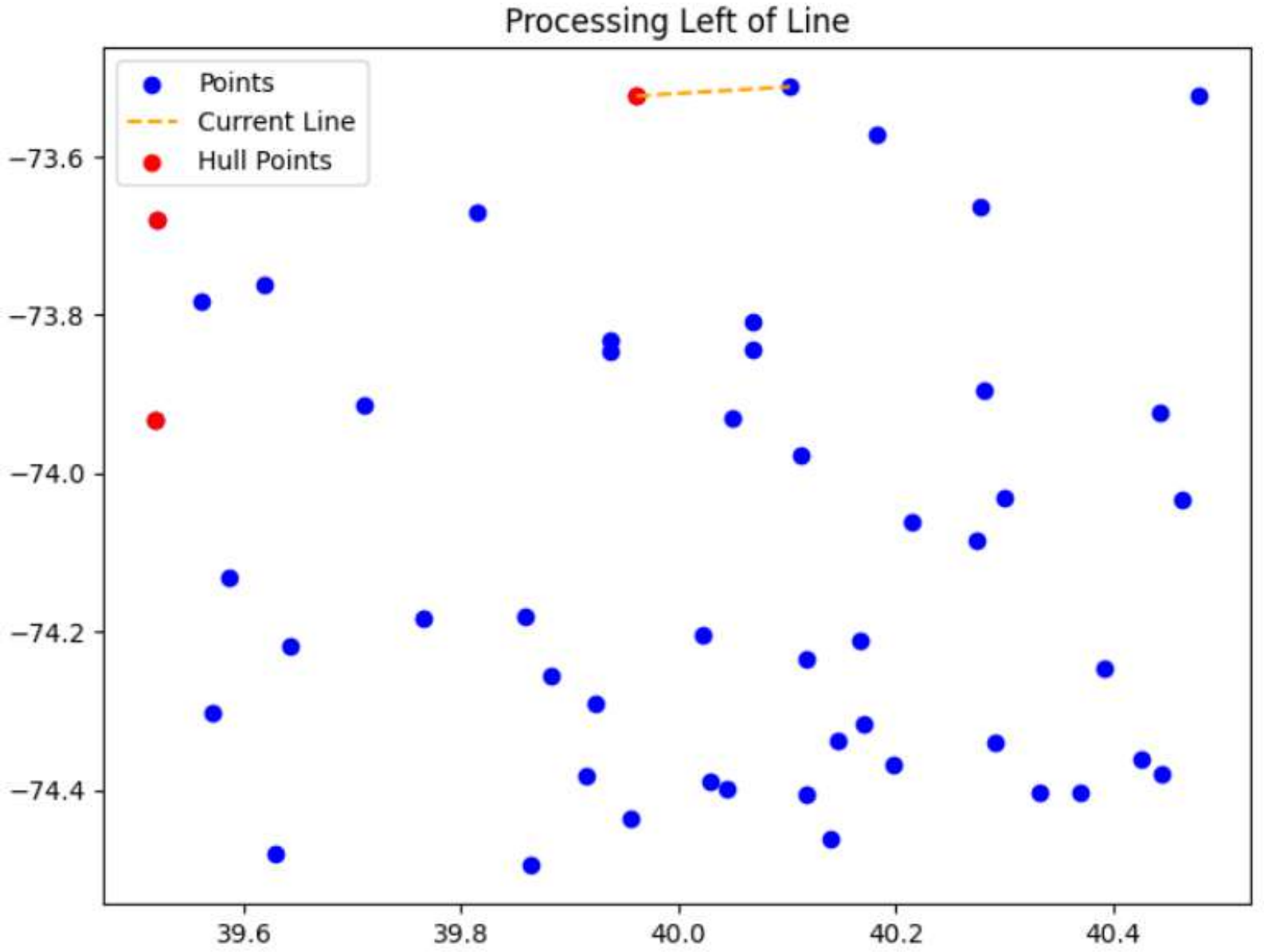
40.4


Processing Left of Line
Points
Current Line
Hull Points
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−74.2
−74.4
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39.8
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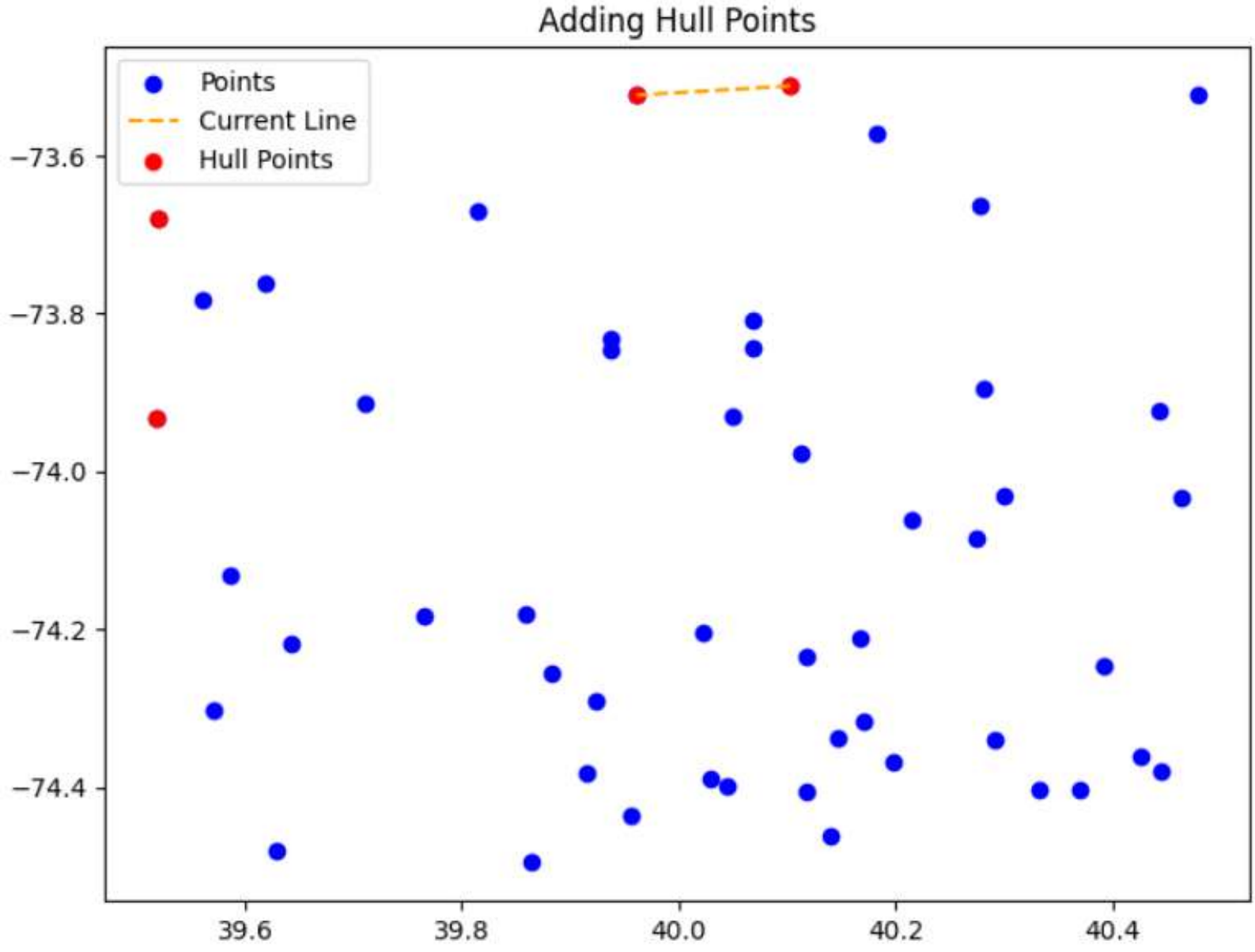
40.2
40.4


Adding Hull Points
Points
Current Line
Hull Points
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−74.0
−74.2
−74.4
39.6
39.8
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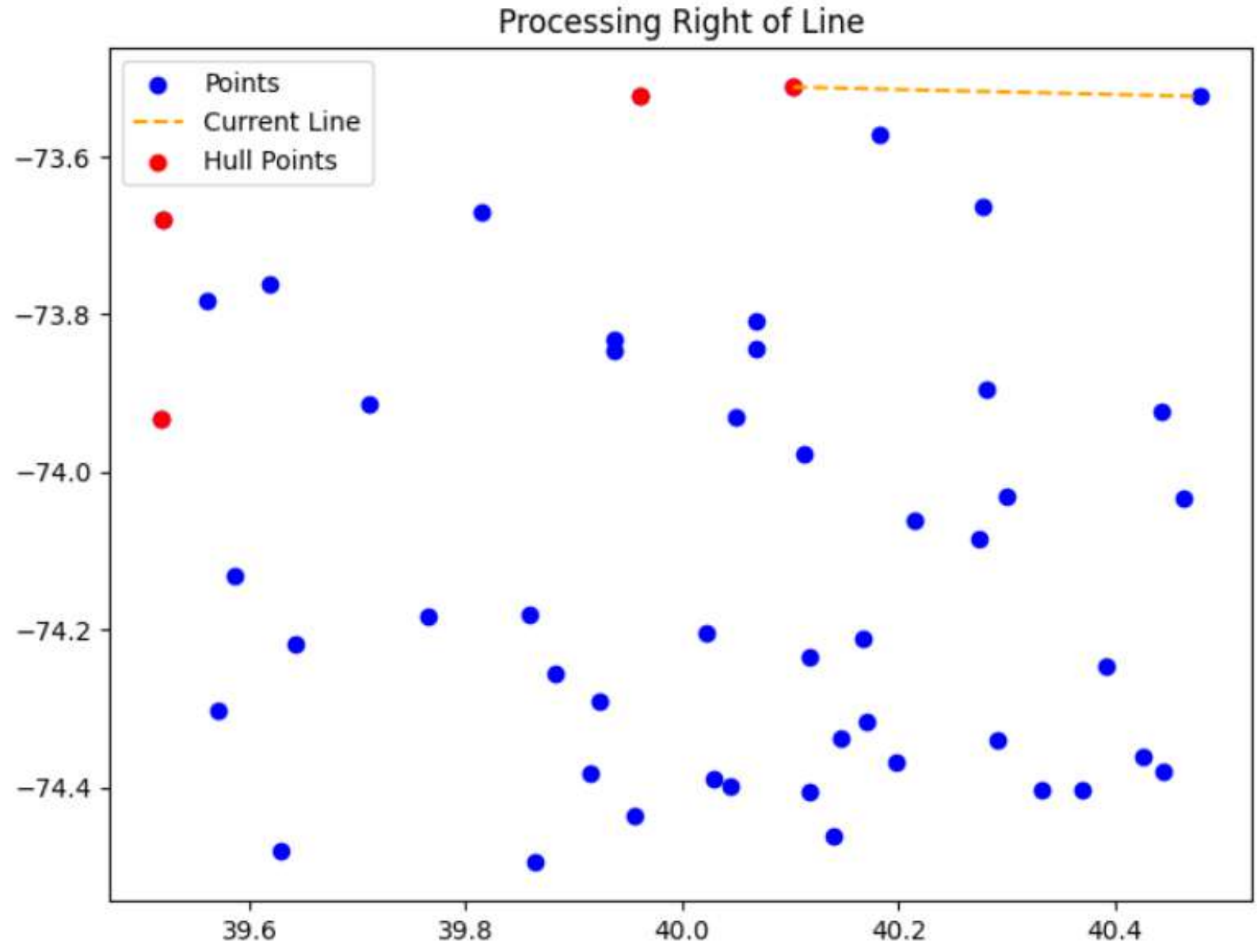
40.2
40.4


Processing Right of Line
Points
Current Line
Hull Points
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−74.2
−74.4
39.6
39.8
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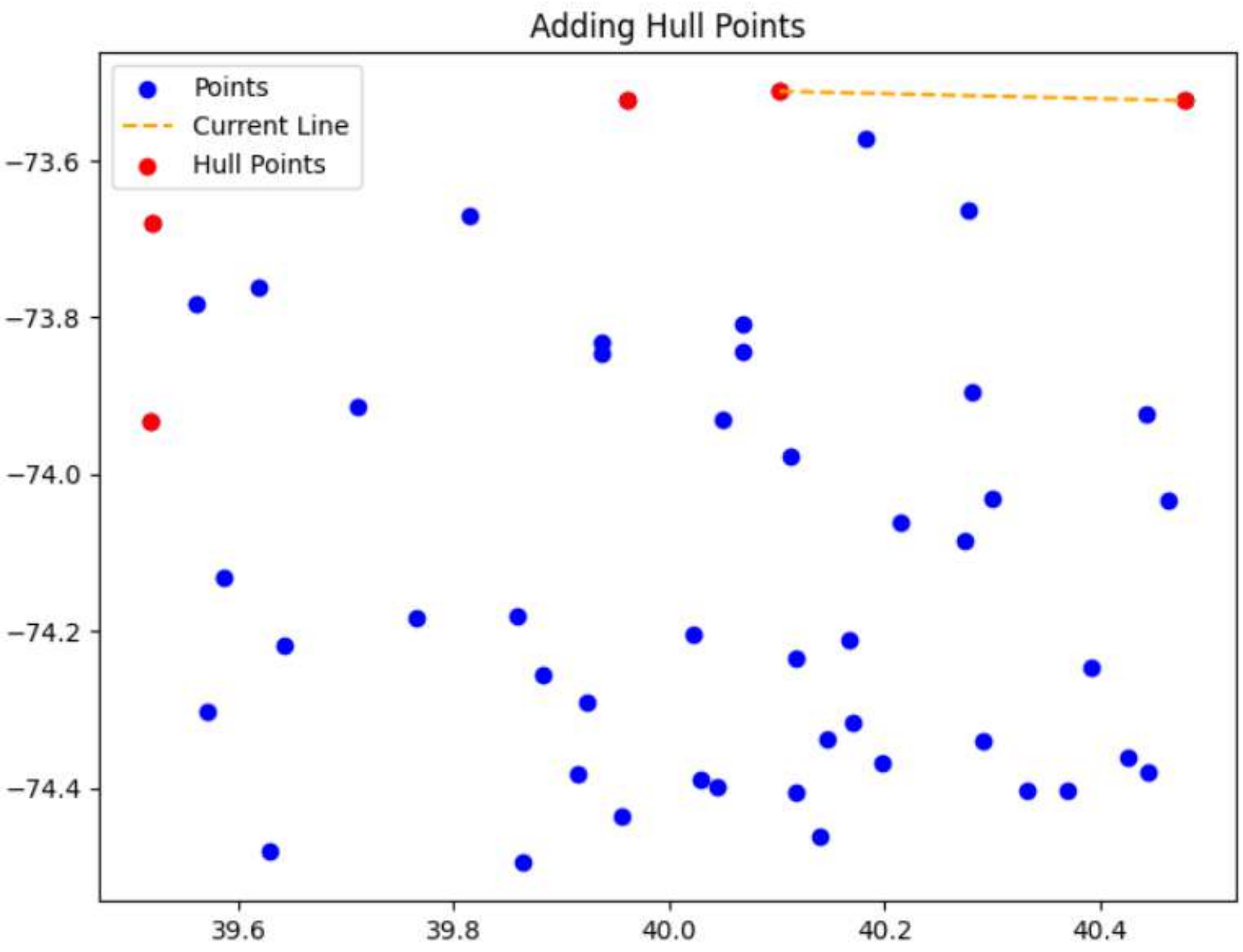
40.2
40.4


Adding Hull Points
Points
Current Line
Hull Points
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−74.0
−74.2
−74.4
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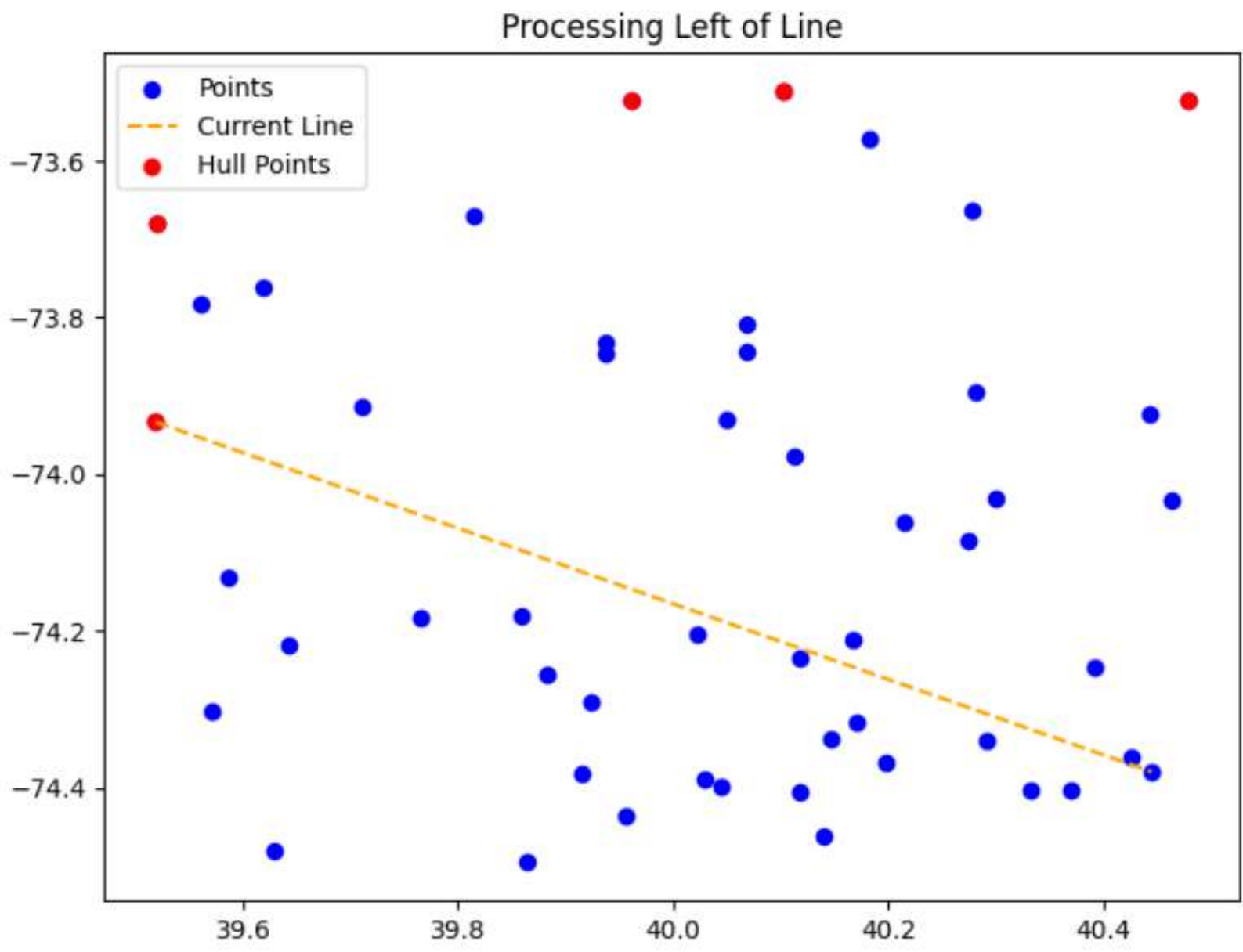
40.2
40.4


Processing Left of Line
Points
Current Line
Hull Points
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40.2
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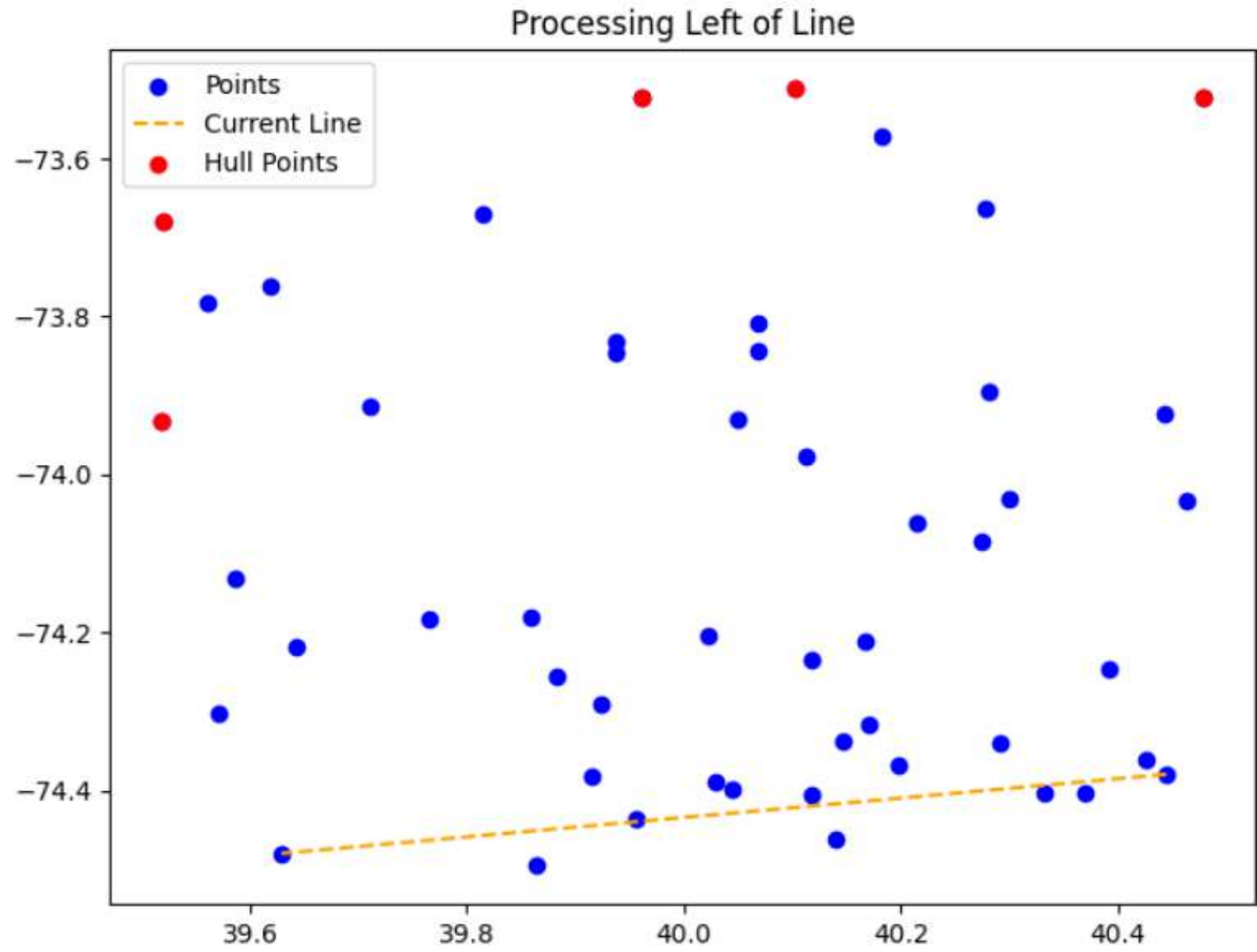
Processing Left of Line
Points
Current Line
Hull Points
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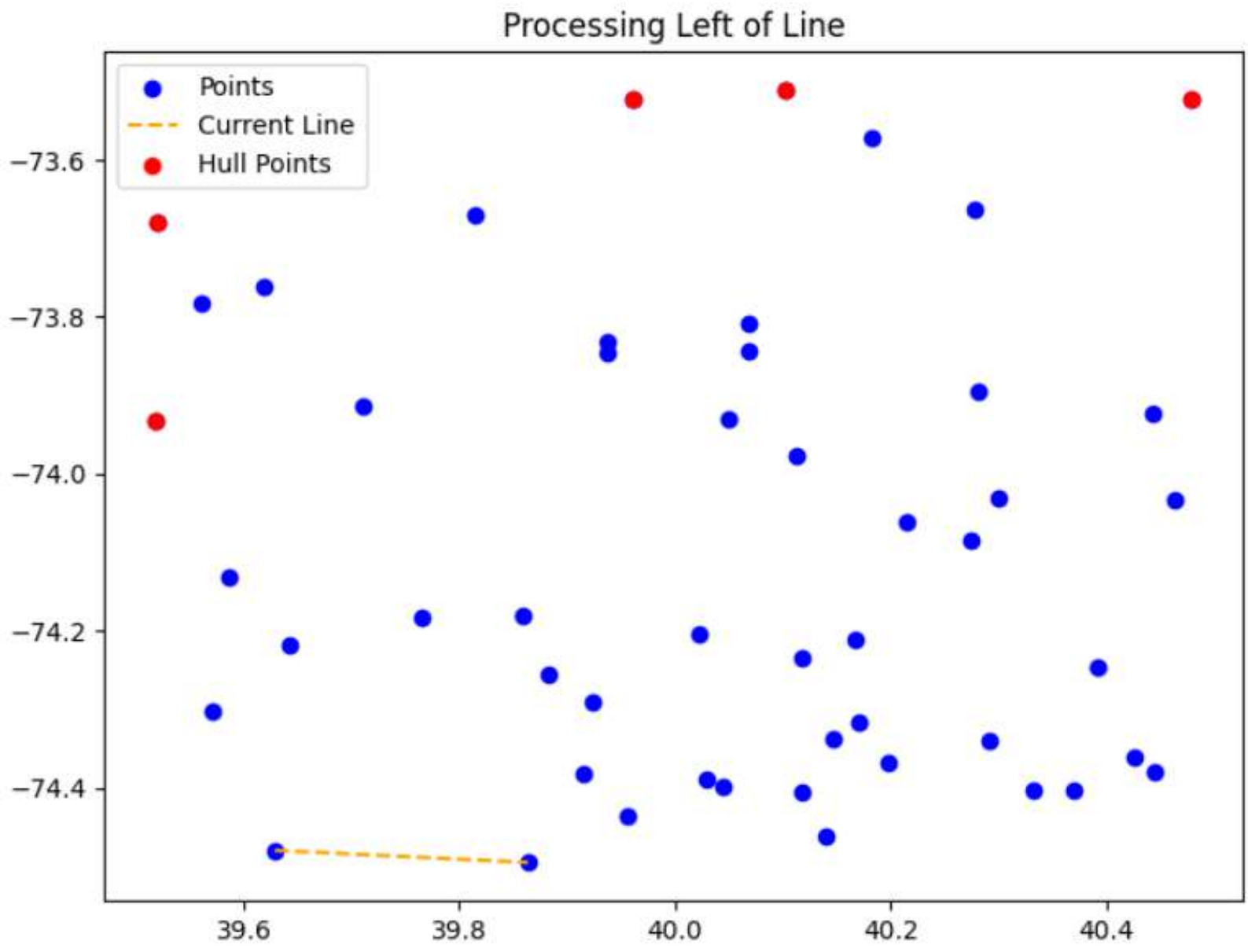
40.4


Processing Left of Line
Points
Current Line
Hull Points
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−74.2
−74.4
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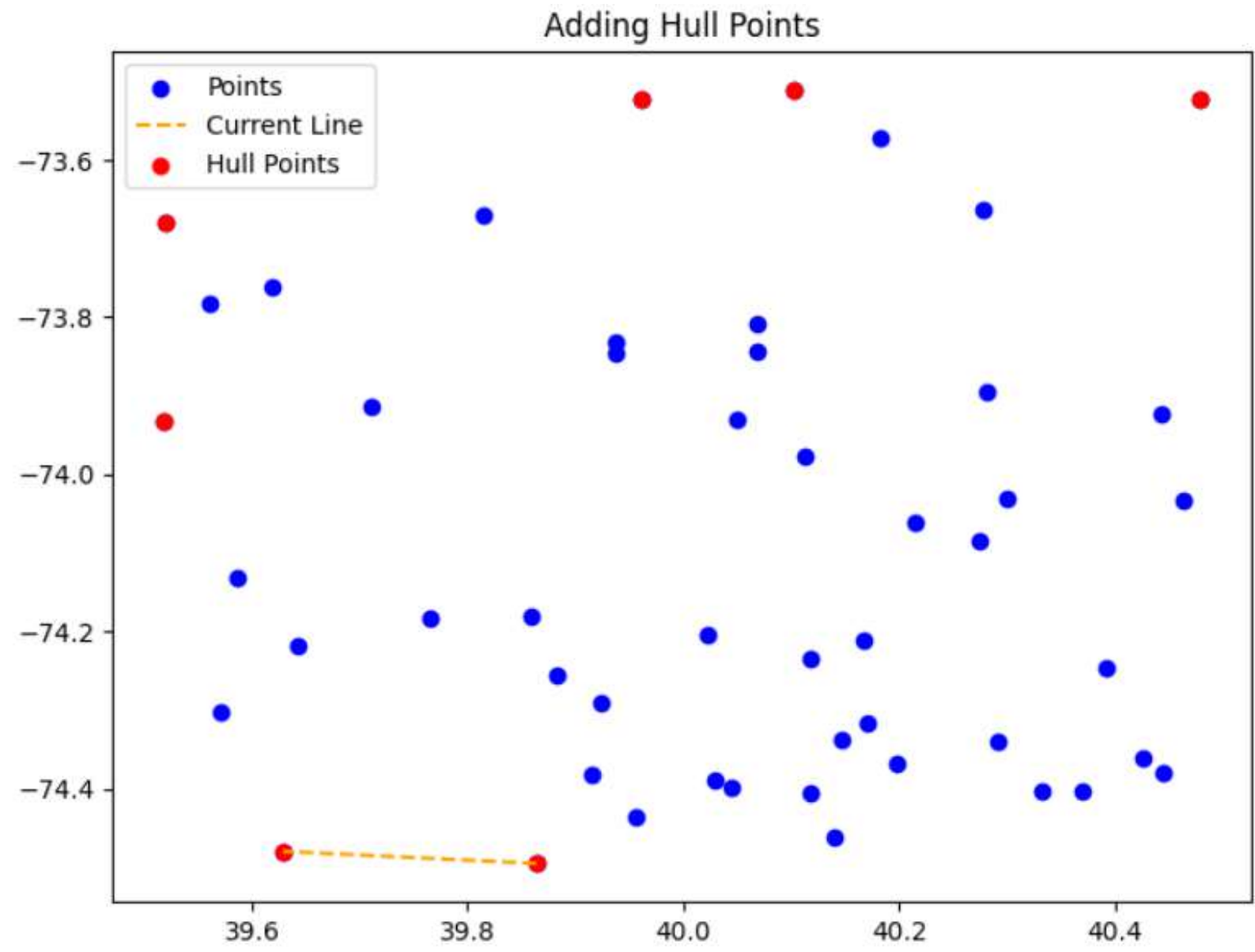
Adding Hull Points
Points
Current Line
Hull Points
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−74.4
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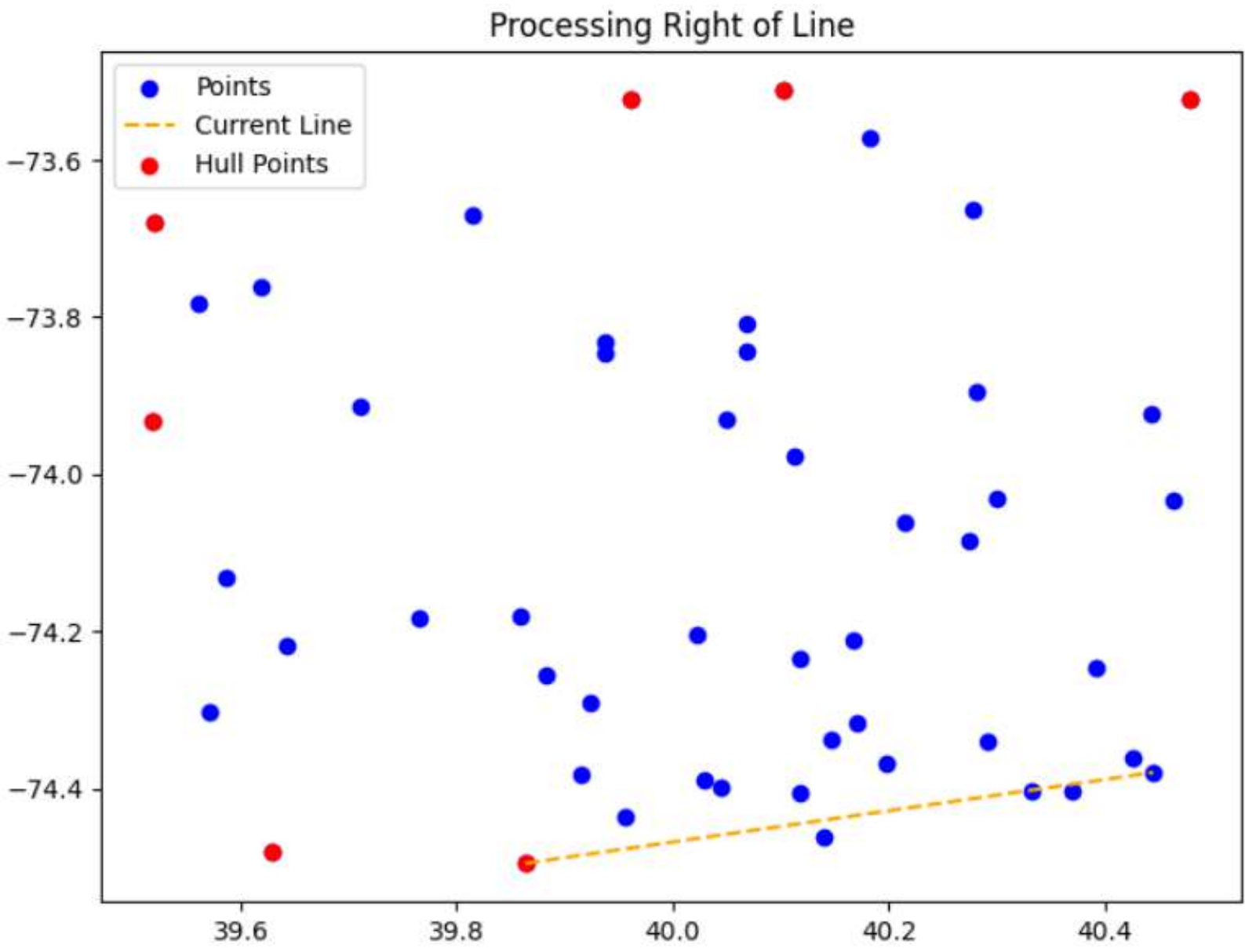
40.2
40.4


Processing Right of Line
Points
Current Line
Hull Points
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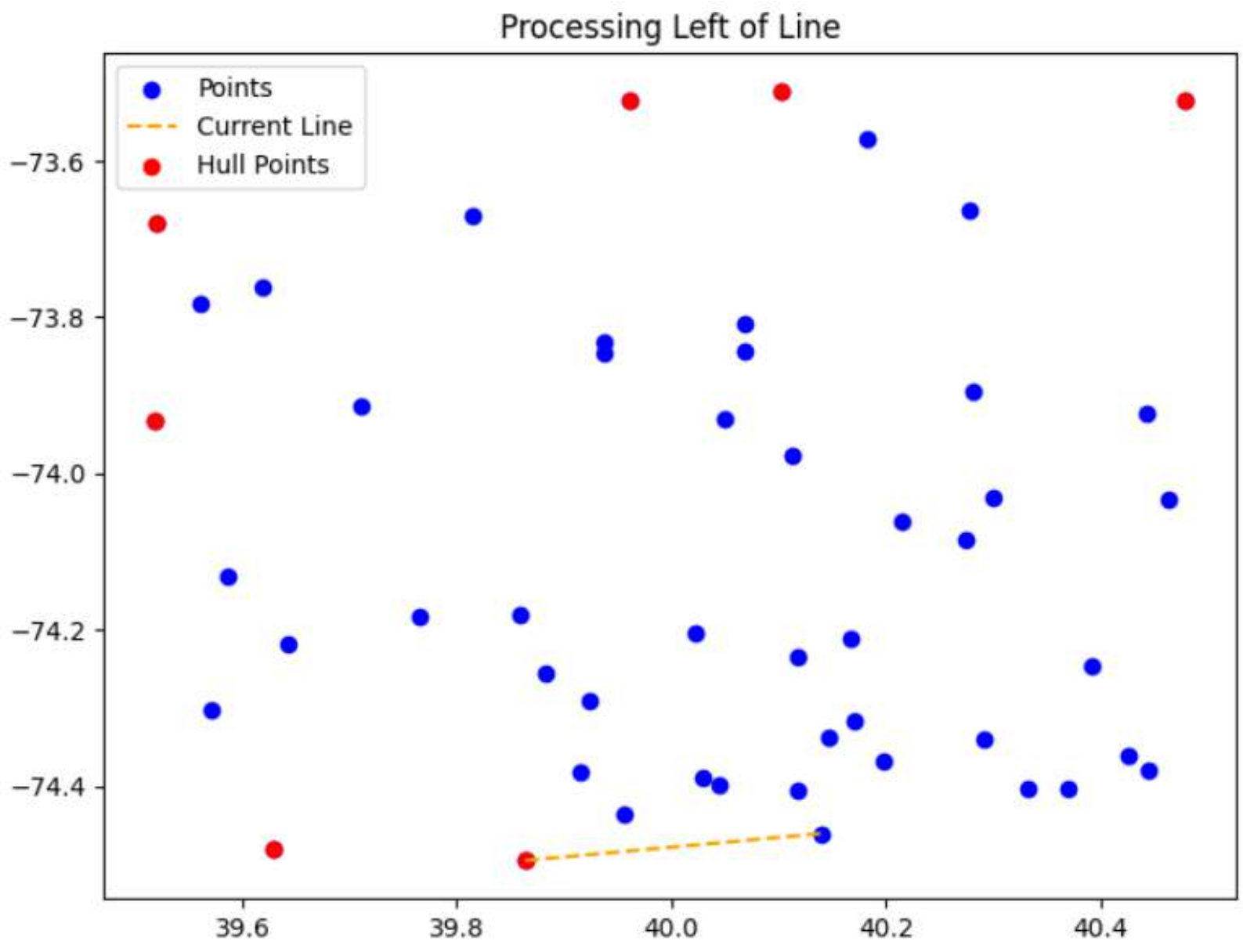
Processing Left of Line
Points
Current Line
Hull Points
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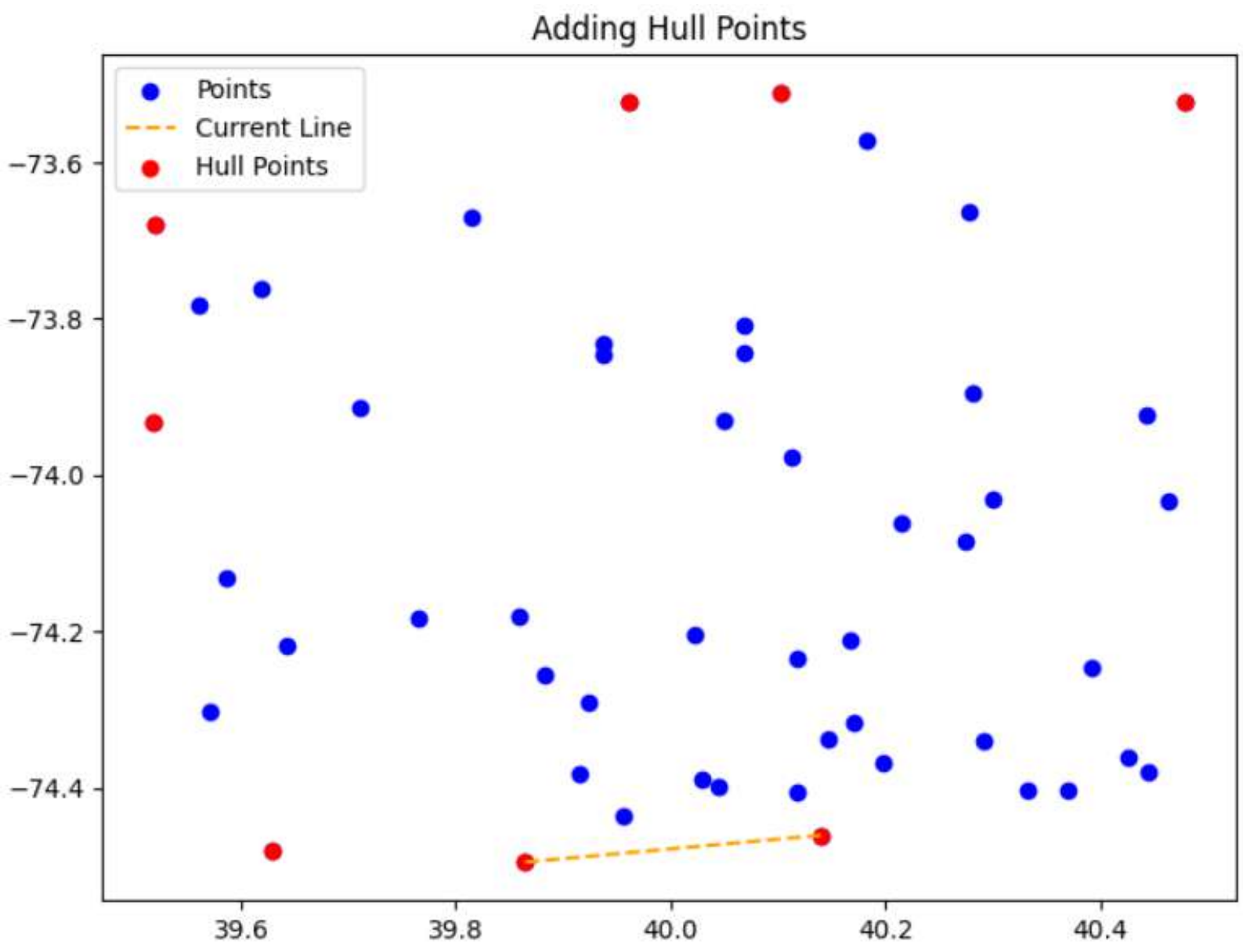
Adding Hull Points
Points
Current Line
Hull Points
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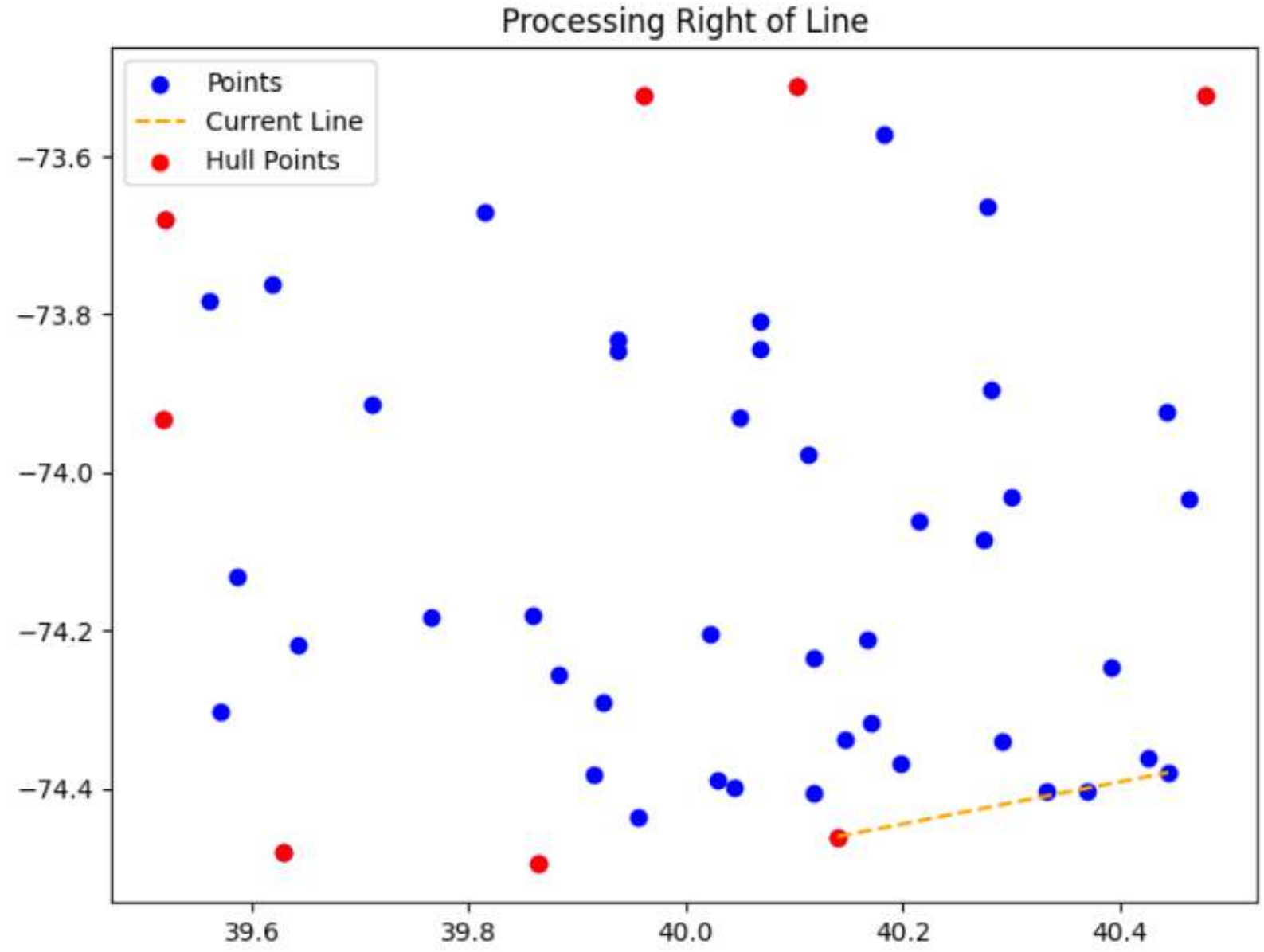
40.4


Processing Right of Line
Points
Current Line
Hull Points
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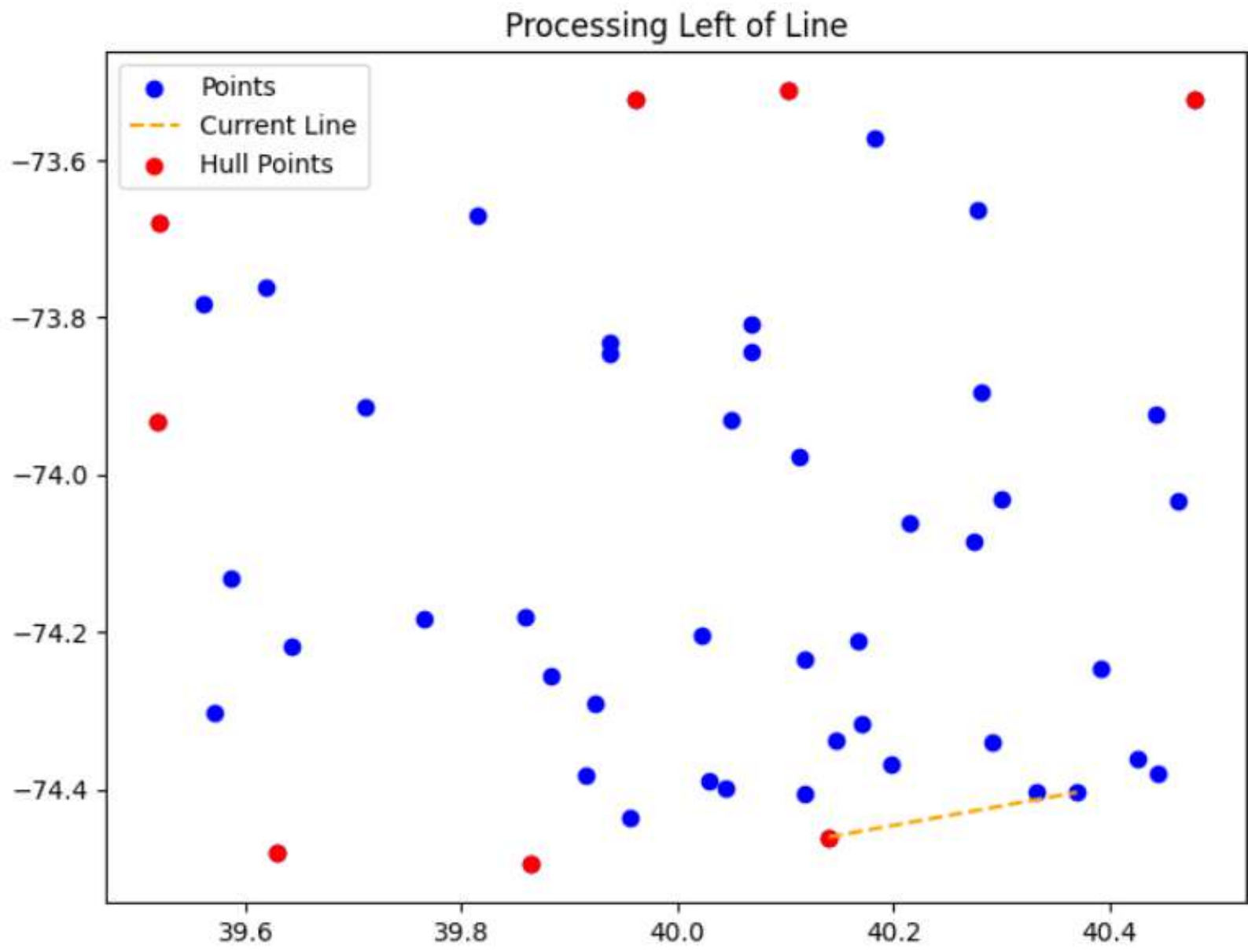
40.4


Processing Left of Line
Points
Current Line
Hull Points
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−74.2
−74.4
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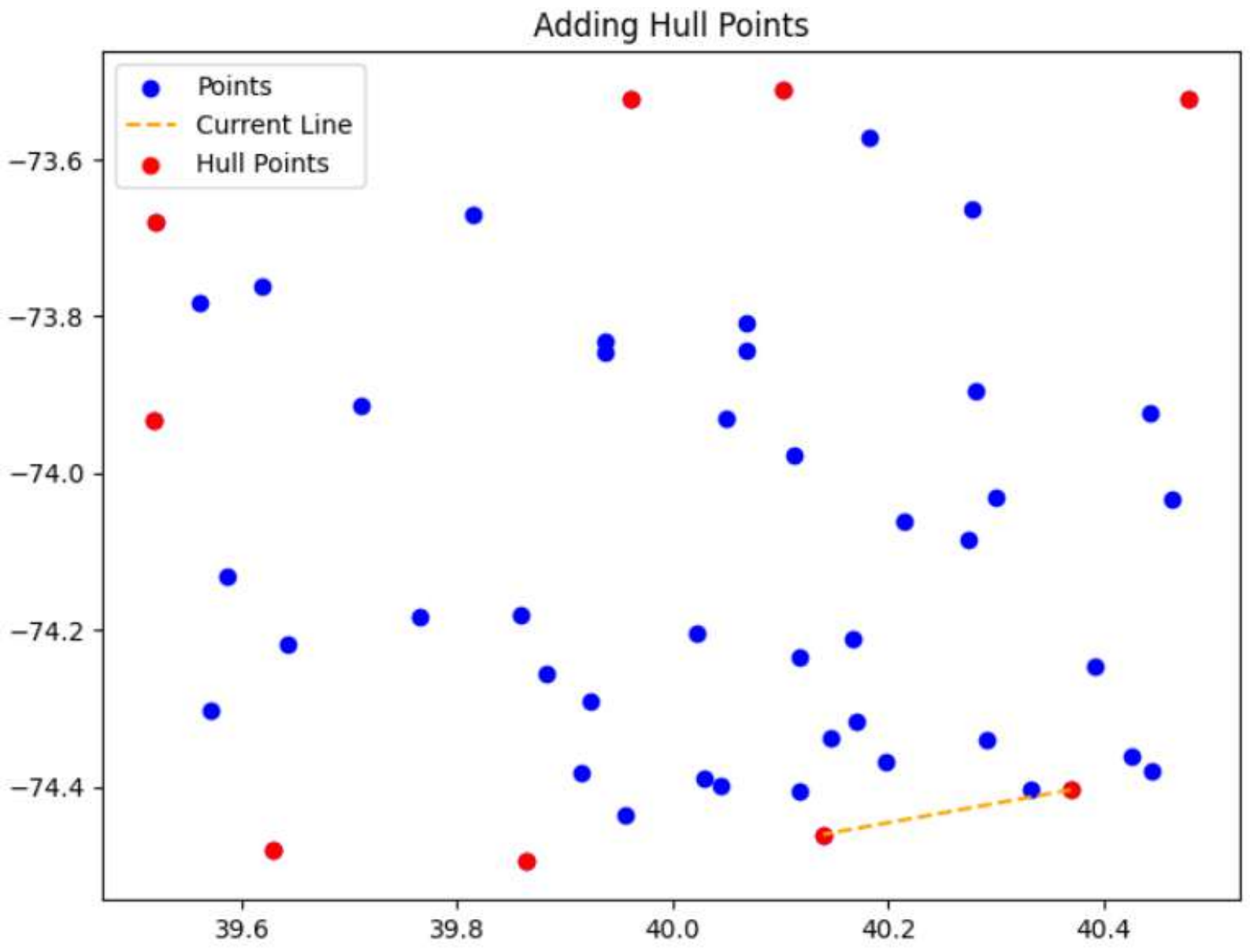
40.2
40.4


Adding Hull Points
Points
Current Line
Hull Points
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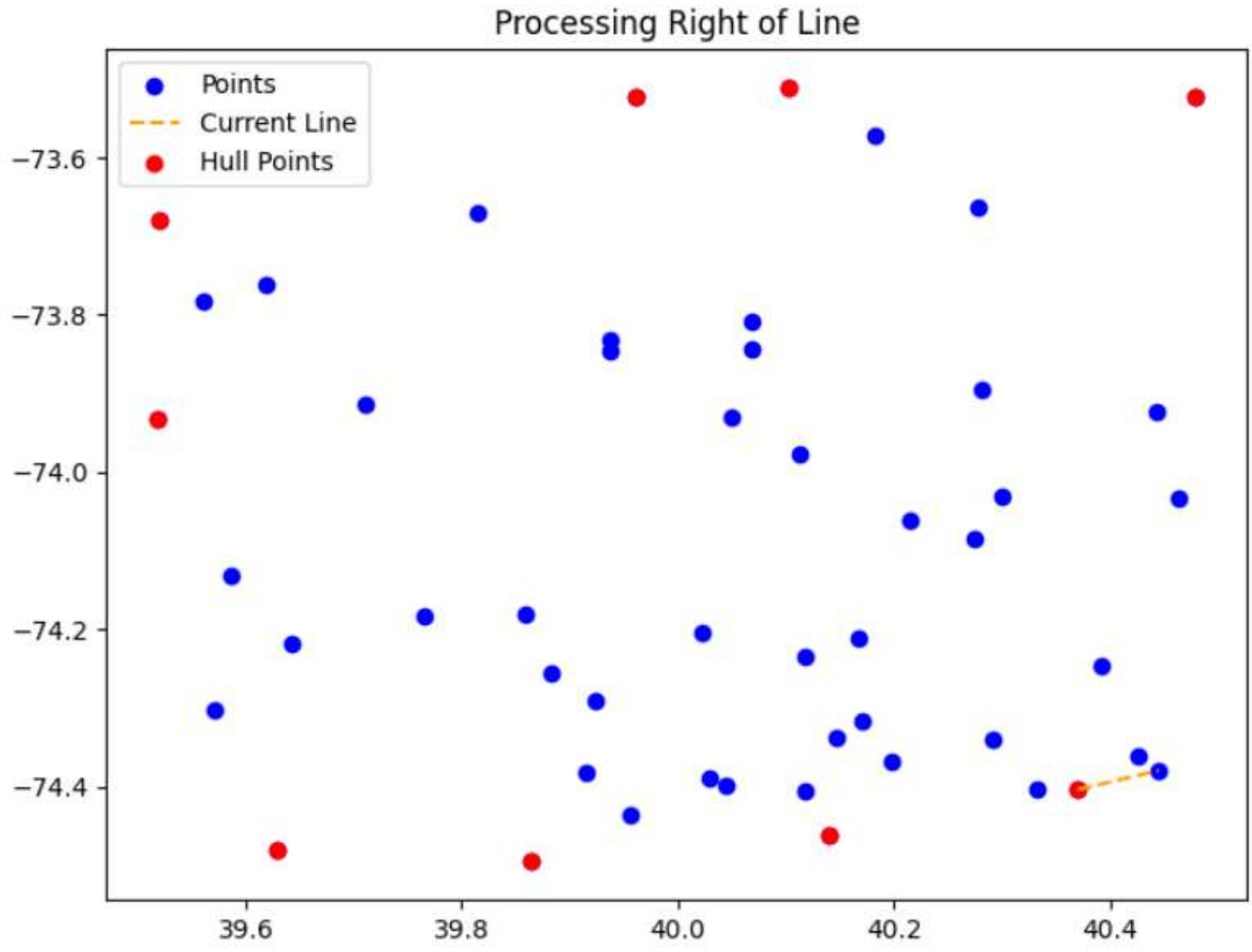
40.4


Processing Right of Line
Points
Current Line
Hull Points
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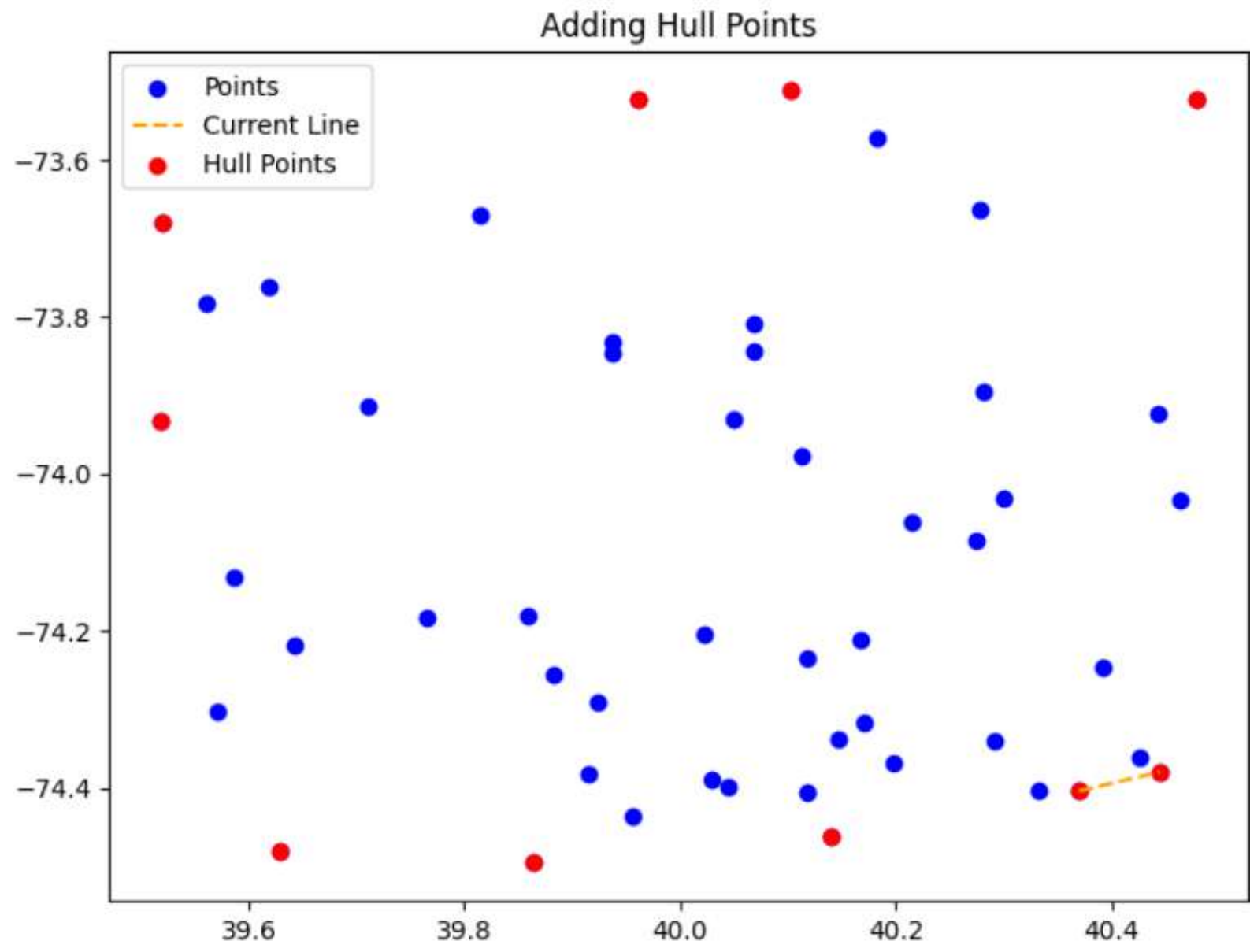
Adding Hull Points
Points
Current Line
Hull Points
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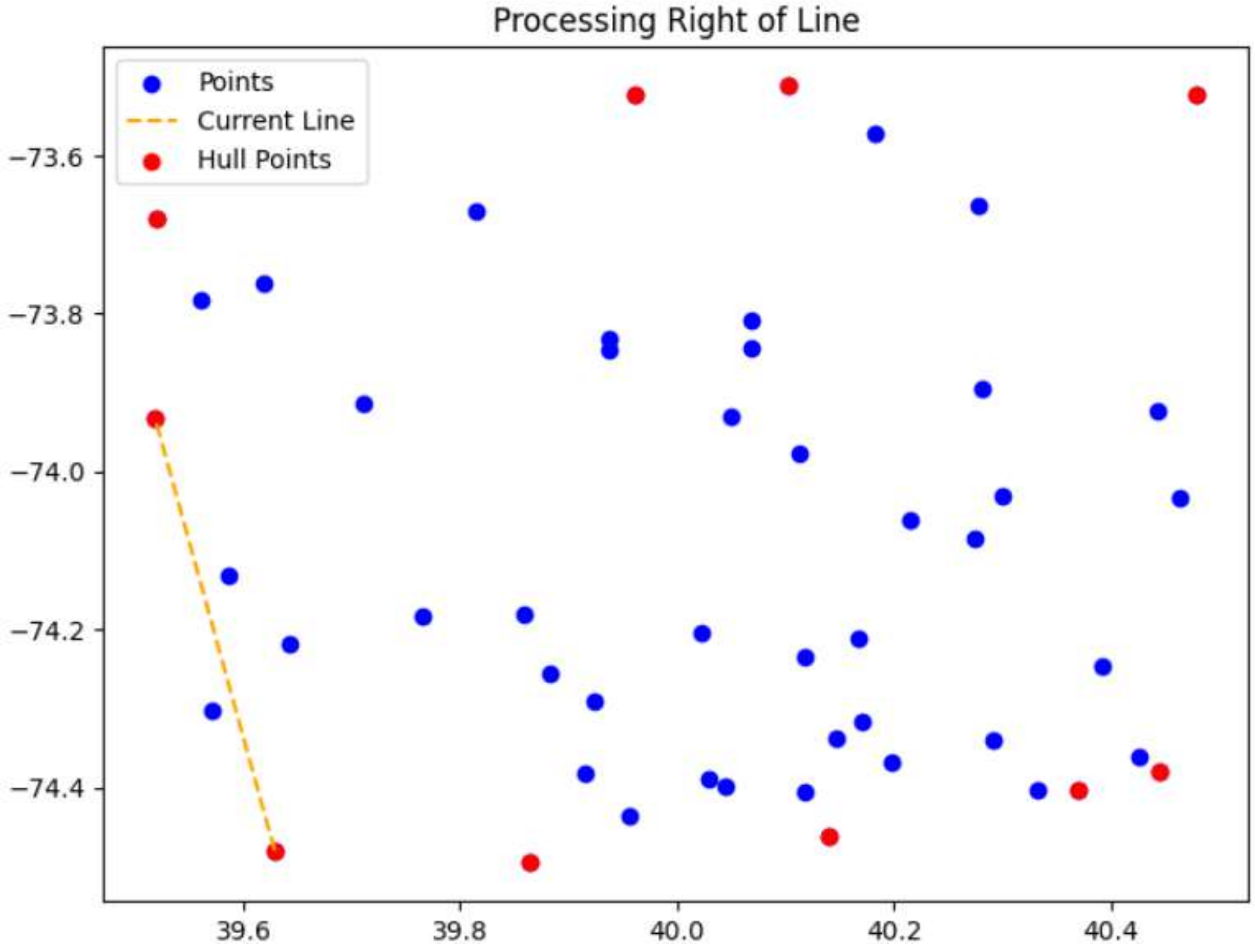
Processing Right of Line
Points
Current Line
Hull Points
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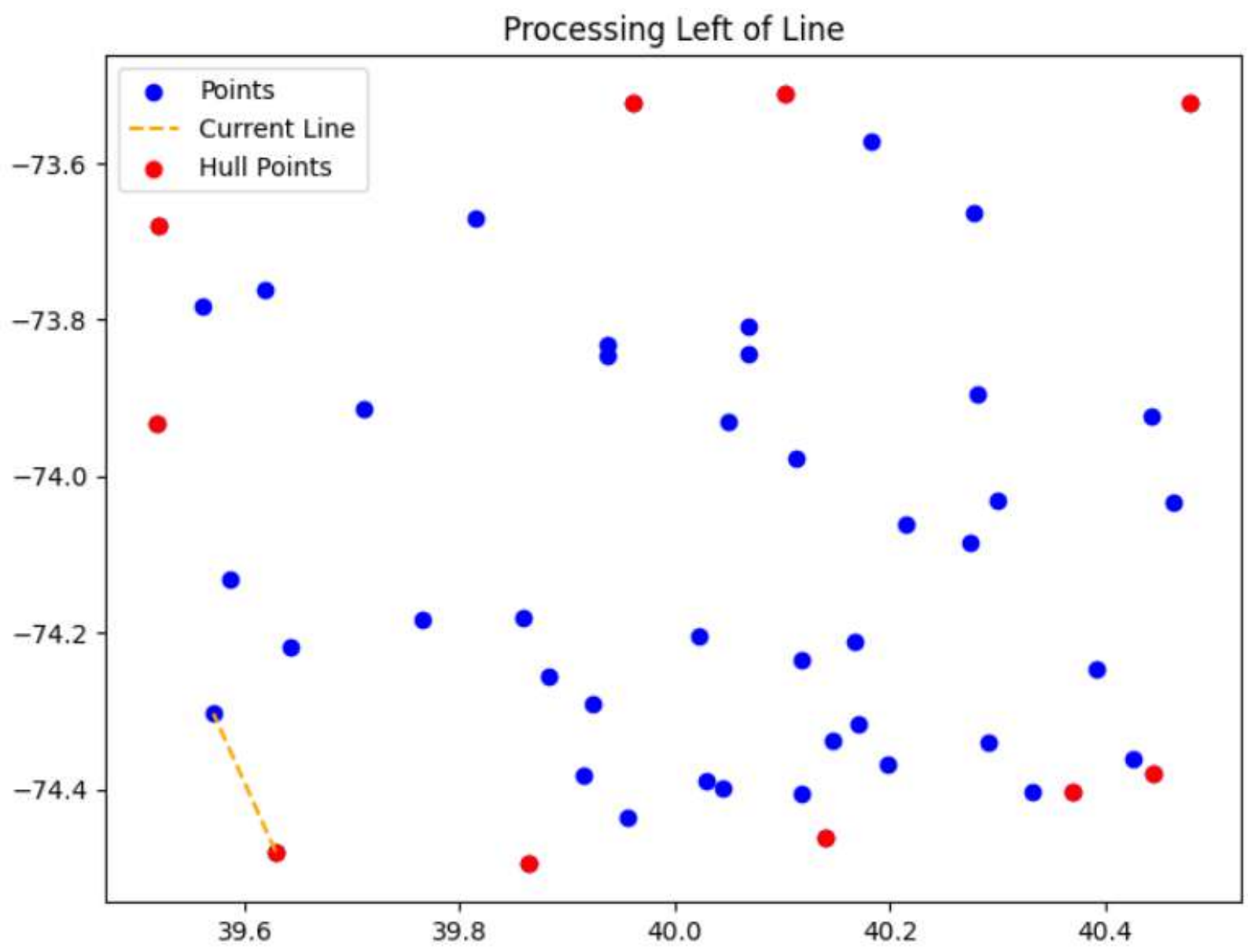
Processing Left of Line
Points
Current Line
Hull Points
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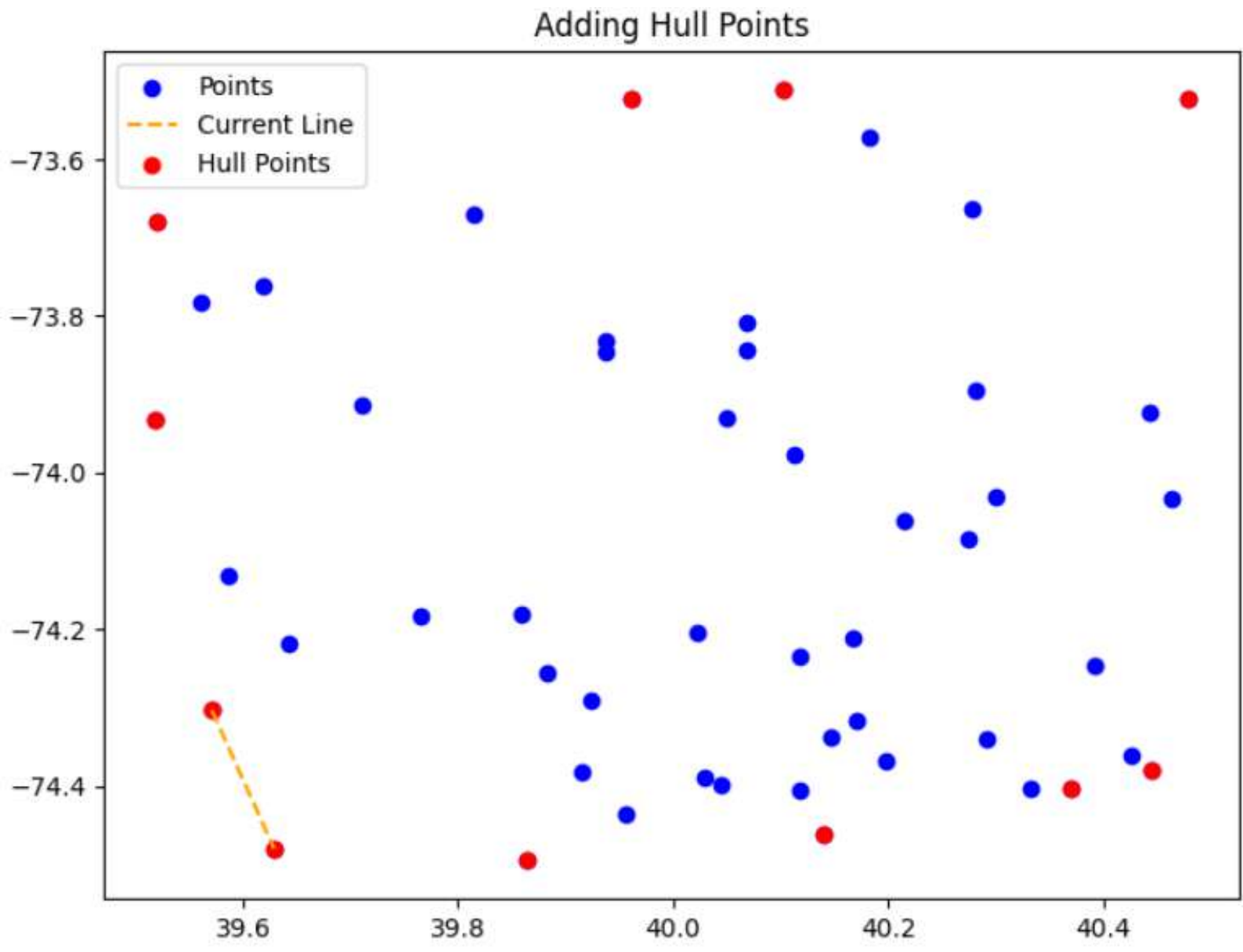
Adding Hull Points
Points
Current Line
Hull Points
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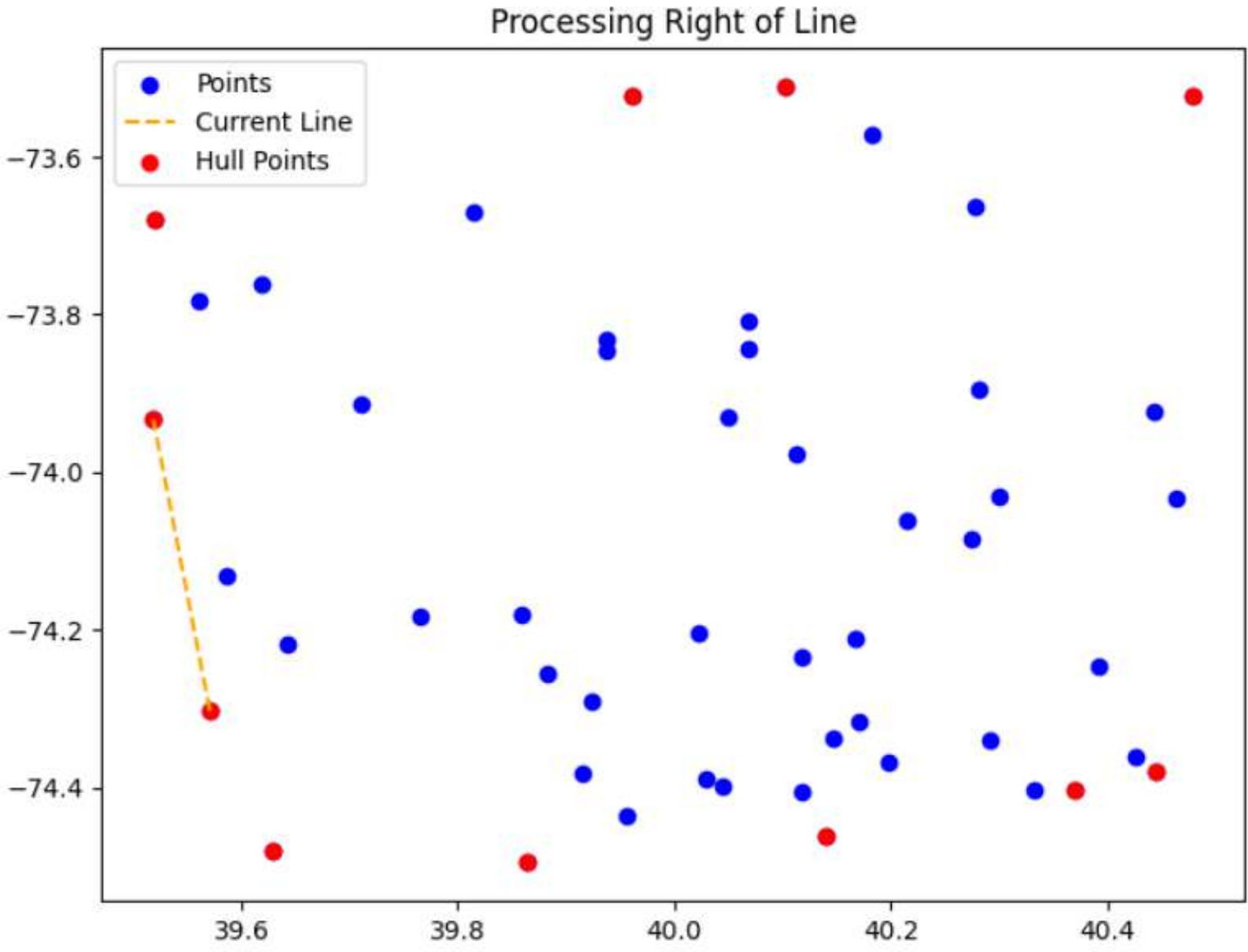
Processing Right of Line
Points
Current Line
Hull Points
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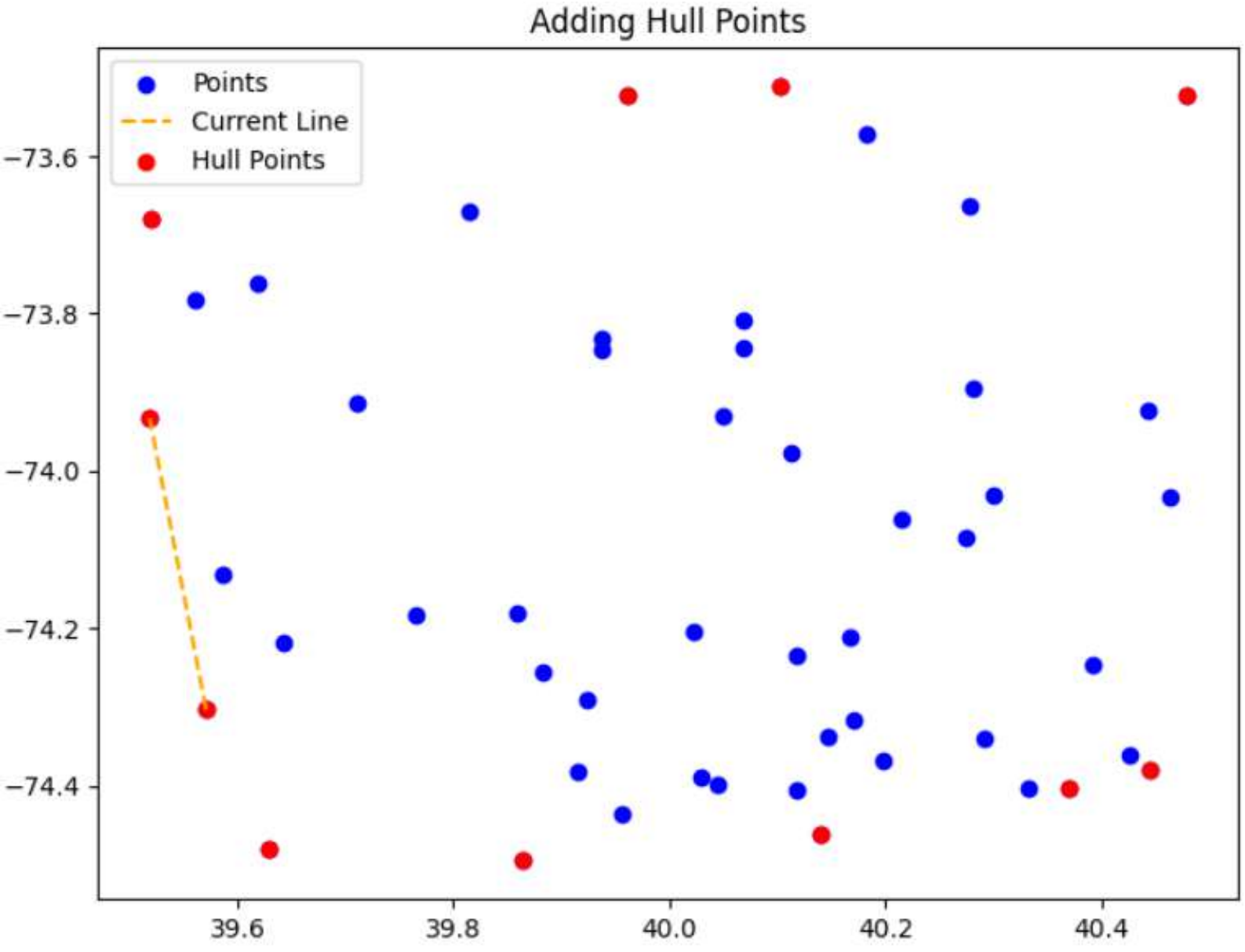
40.4


Adding Hull Points
Points
Current Line
Hull Points
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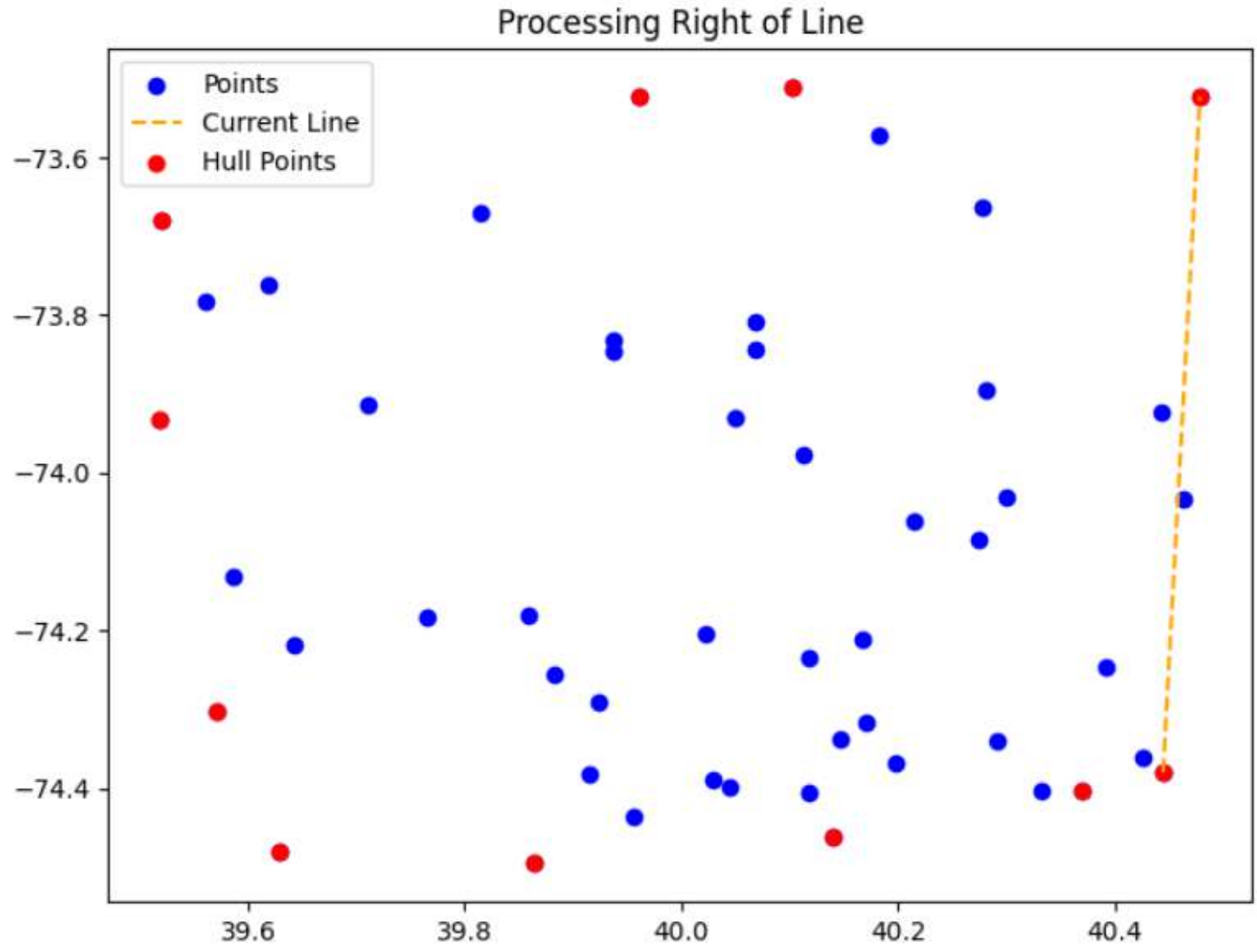
Processing Right of Line
Points
Current Line
Hull Points
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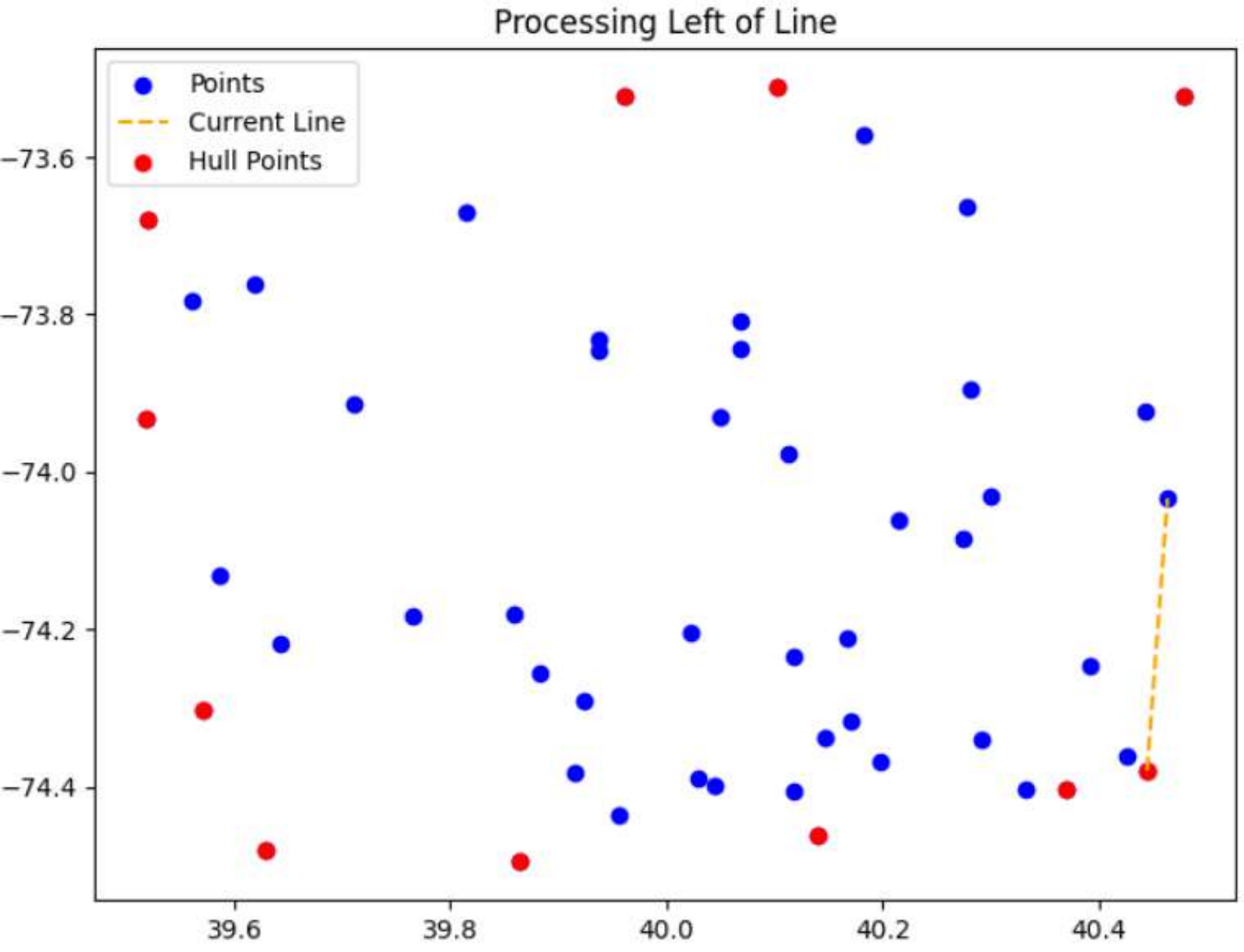
Processing Left of Line
Points
Current Line
Hull Points
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39.6
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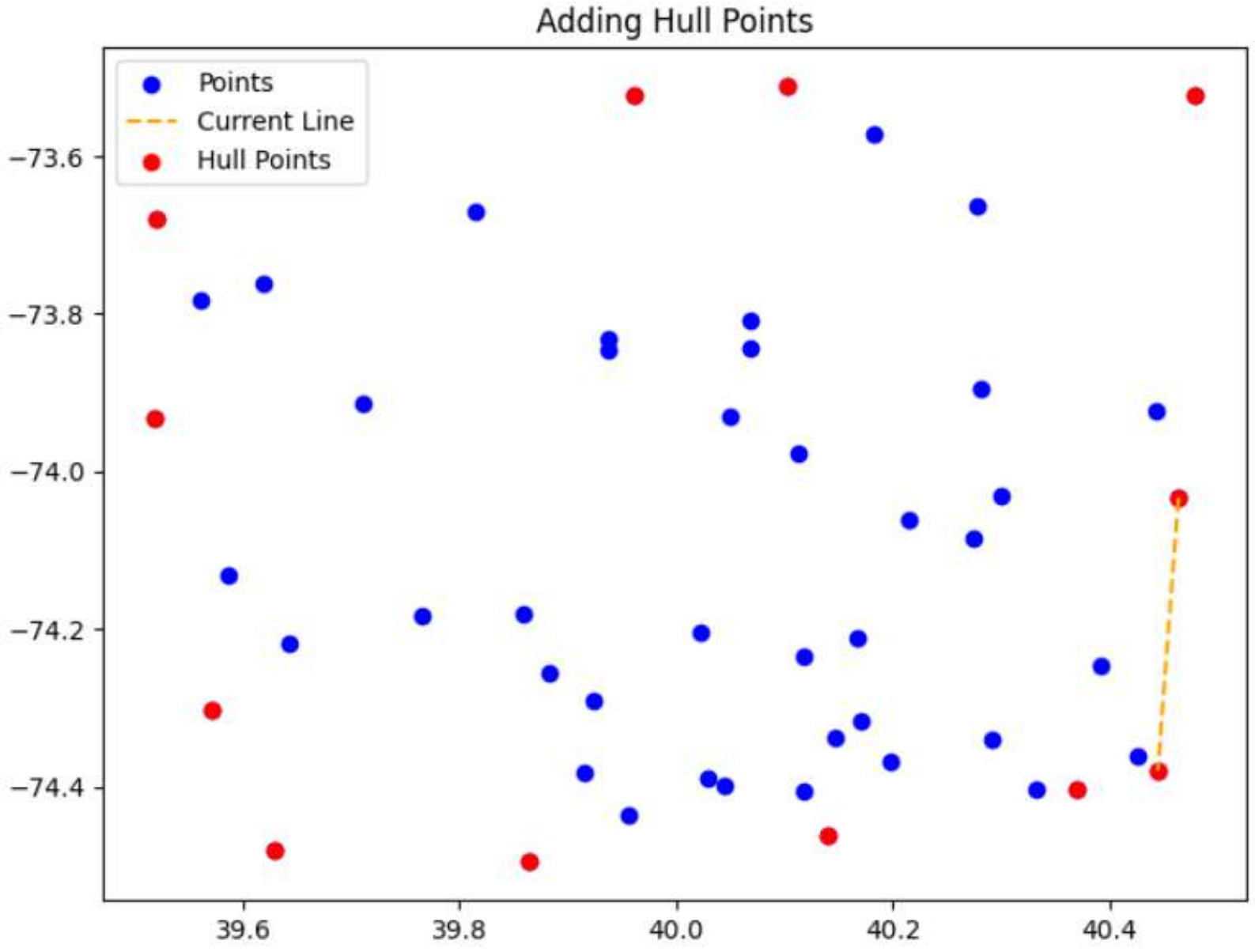
Adding Hull Points
Points
Current Line
Hull Points
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39.6
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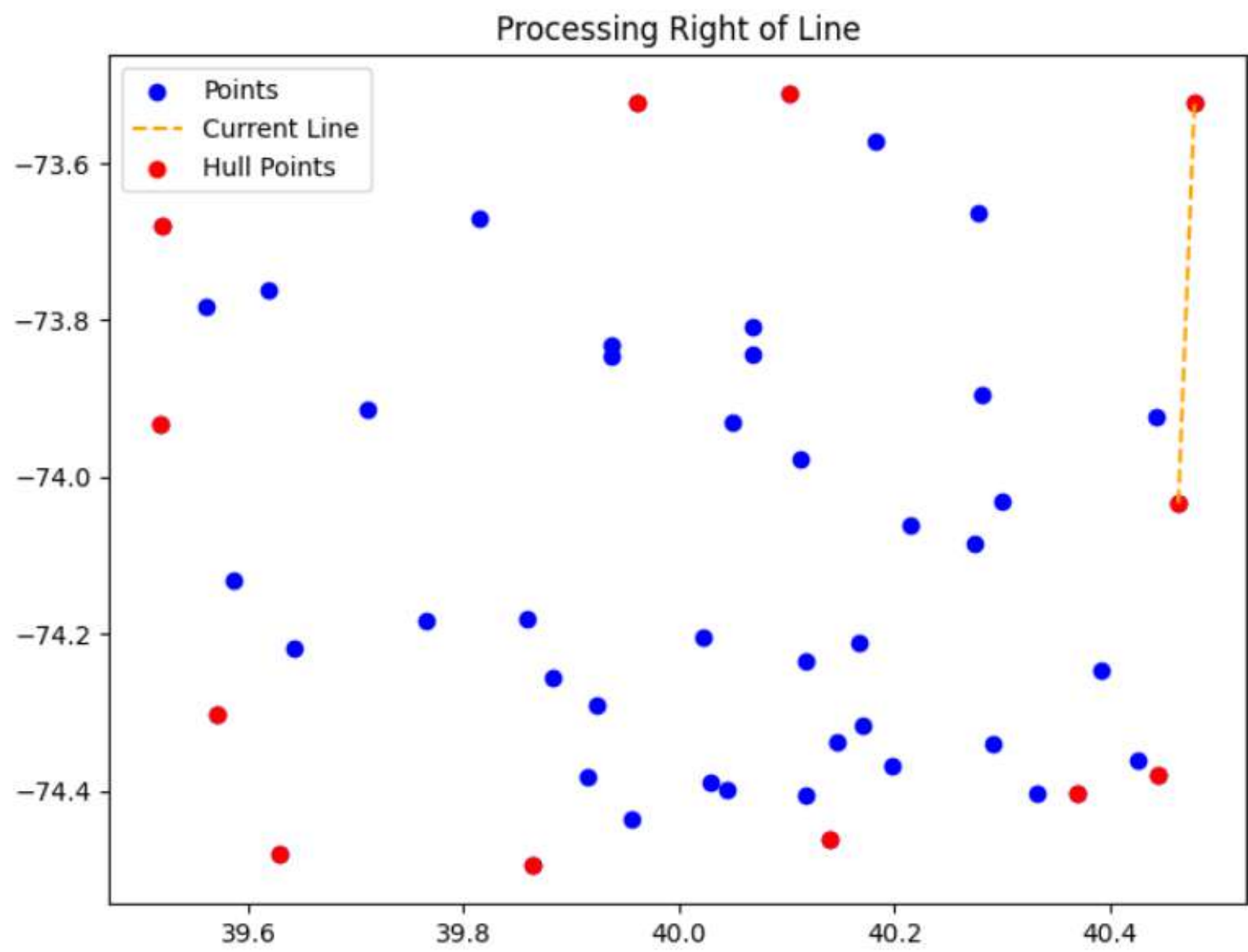
40.4


Processing Right of Line
Points
Current Line
Hull Points
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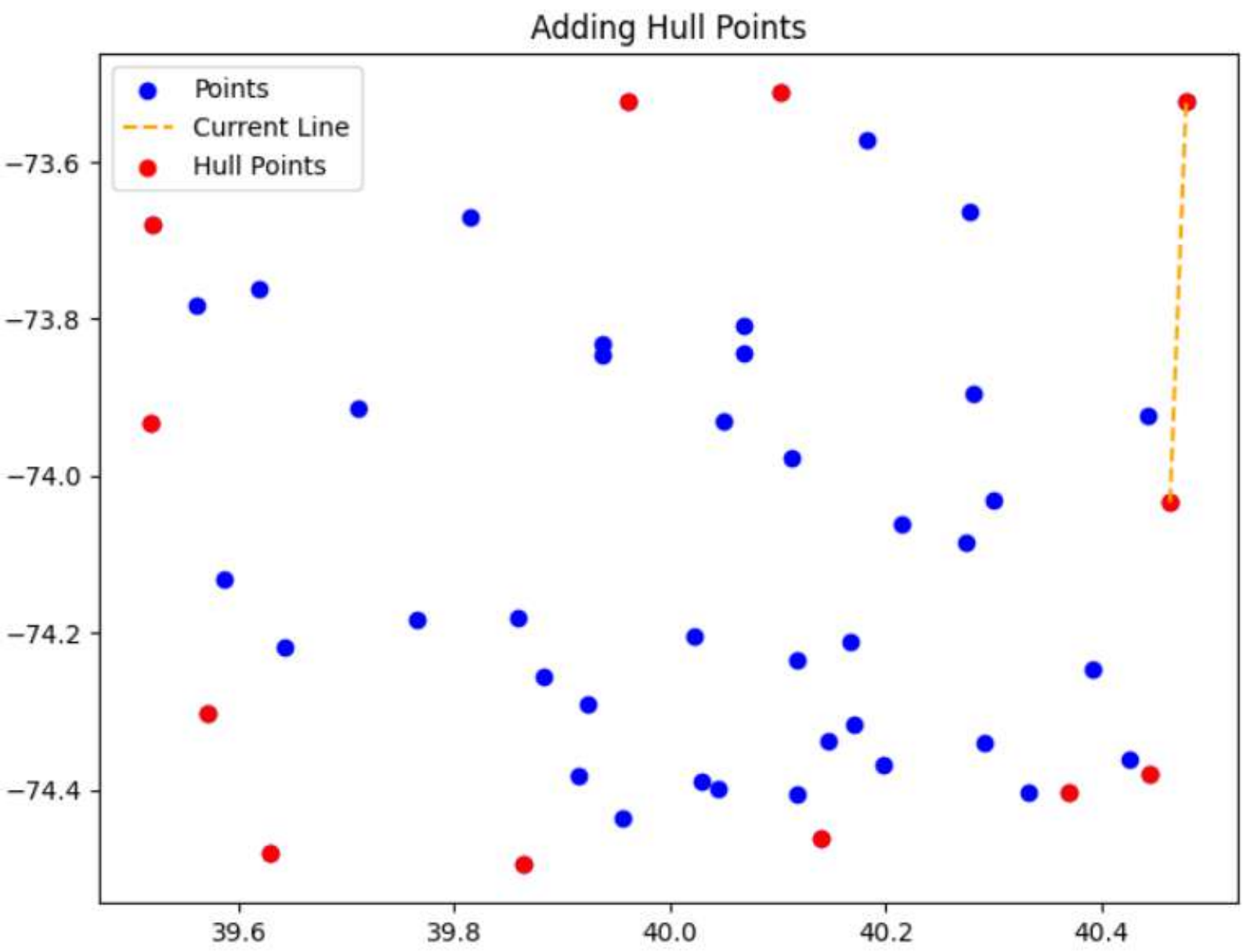
40.4


Adding Hull Points
Points
Current Line
Hull Points
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39.6
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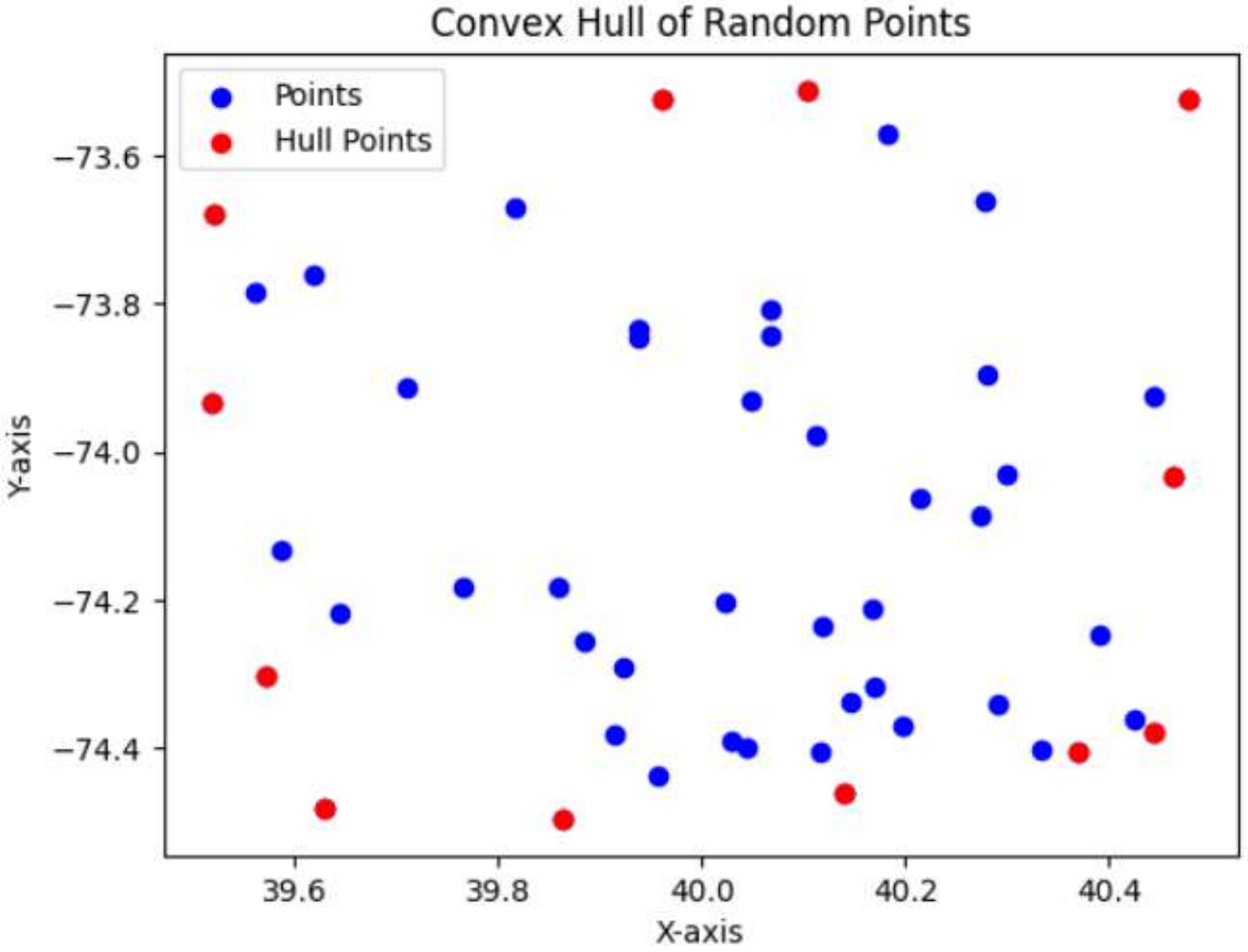
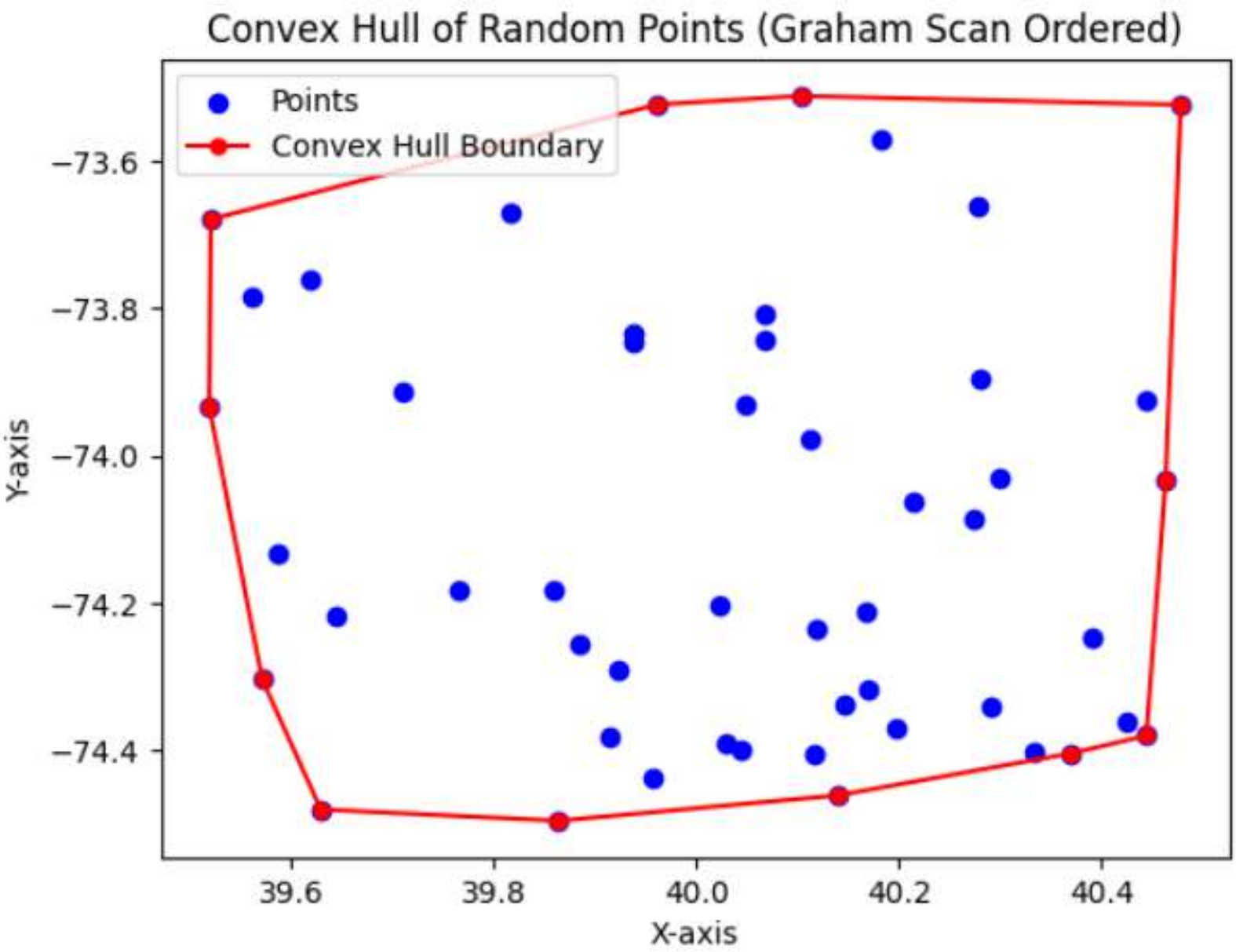
40.2
40.4


Convex Hull of Random Points
Points
Hull Points
−73.6
−73.8
−74.0
−74.2
−74.4
Y-axis
39.6
39.8
40.0
40.2
40.4
X-axis


Convex Hull of Random Points (Graham Scan Ordered)
Points
Convex Hull Boundary
−73.6
−73.8
−74.0
−74.2
−74.4
Y-axis
39.6
39.8
40.0
40.2
40.4
X-axis