Universität der Bundeswehr München
Fakultät für Informatik
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Assignment 2

Computational Geometry

May 10, 2018

Exercise 3

Let S be a set of n disjoint line segments in the plane, and let p be a point not on any of the line segments of S. We wish to determine all line segments of S that p can see, that is, all line segments of S that contain some point q so that the open segment $[p, q]$ doesn't intersect any line segment of S. Give an $O(n \log n)$ time algorithm for this problem that uses a rotating ray with its endpoint at p.