Report

The core concepts of this algorithm are listed below.

1. Finding the maximum radius among those circles that contain 11 points is to find the minimum radius among those circles that contain 12 points.

2. The minimum "radiuses" will be found in a circle that "just" contains 12 pints, which means there are at least two points on the circle's boundary. Mathematically speaking, the min radius will be found under this circumstance, where there are points a=(x1,y1) and b=(x2,y2). and there is a circle centered at point c=((x1+x2)/2, (y1,+y2)/2), and the circle's radius is sqrt((x1-x2)^2 + (y1-y2)^2), there are 12 points in such a circle. 3. keep updating the minimum radius. 4. speed up by filtering points has longer distance.