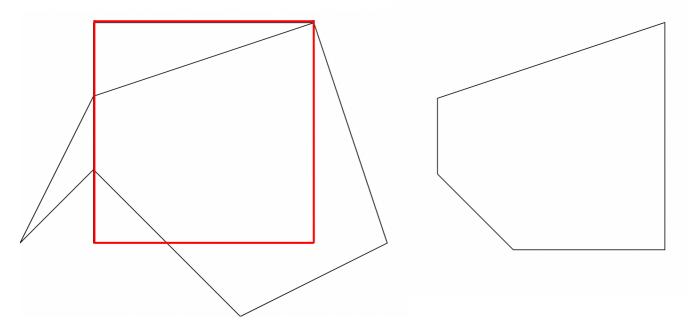
CSE 306: Assignment 2

Polygon Clipping

We implemented the Sutherland-Hodgman polygon clipping algorithm. The goal is to only consider the part of the subject polygon that is contained inside of the clipping polygon.

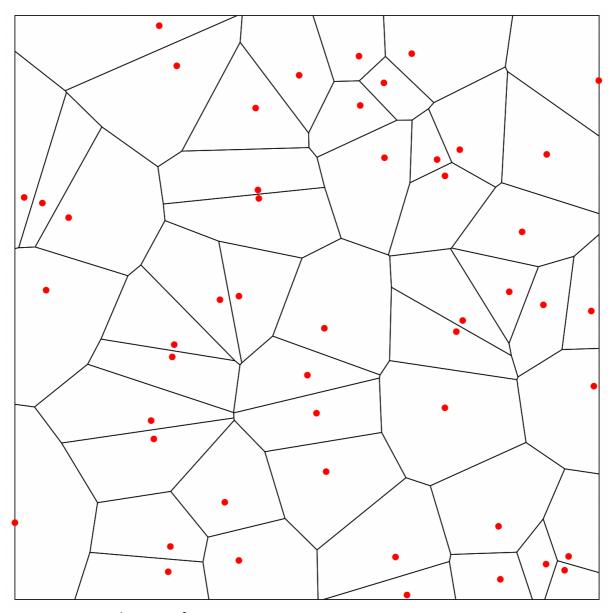


The two polygons before the clipping

The result of the clipping

Voronoi Diagram

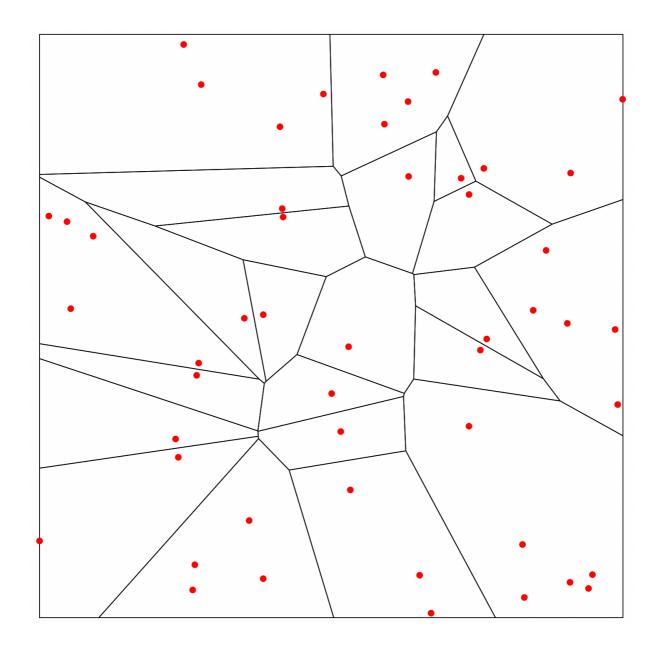
Using the Sutherland-Hodgman polygon clipping algorithm, we implemented the Voronoï Parallel Linear Enumeration in order to create a Voronoi diagram. To display the points, I created small spheres using the svg features. Antonin Wattel helped me with this part of the code.



Voronoi diagram for 50 points

Voronoi Power Diagram

We extended the algorithm to compute the power diagram. We initialized the weights in the center to 1 and the weights in the borders to 0.8.



Power Diagram for 50 points