CISC 499 Project
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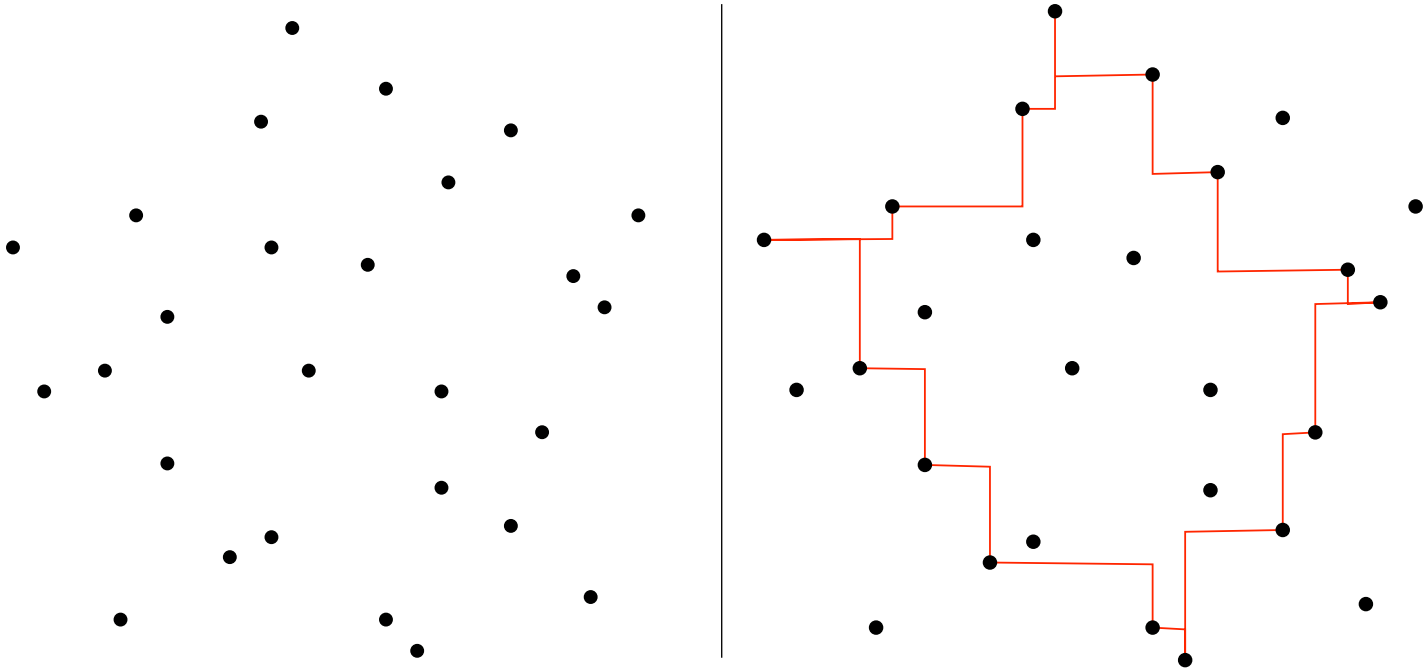
Maximum Rectilinear Convex Subsets

A polygon P is defined to be *Rectilinear Convex* if the non-empty intersection of P with any horizontal or vertical line is a single connected component. A *maximum rectilinear convex subset* of a set of points S is a subset of S that are the vertices of a rectilinear convex polygon that has a maximum number of vertices.



For example in the figure above the red polygon on the right is a maximum rectilinear subset of the points on the left. Together with an international team of researchers we have come up with efficient dynamic programming algorithms to solve this as well as other related problems.

In this project you will be implementing one or more of these algorithms. Furthermore your software should display the results in a visually appealing way.

Skills that I am looking for are:

- Creativity
- Ability to understand a high level description of an algorithm and obtain a working implementation with a graphic visualization.
- Ability to test the program and collect empirical data relevant to the project