

PFLOCK Report

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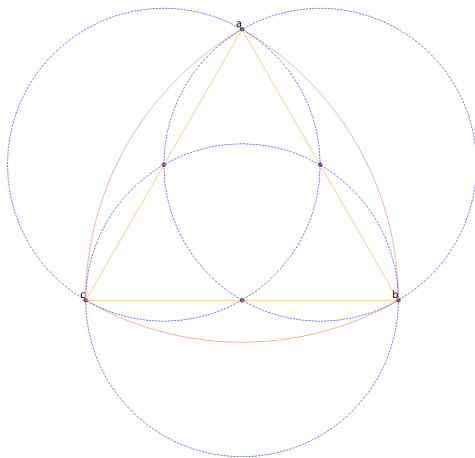
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Testing new approach

- ▶ Compare with BFE. Working with a 10K points dataset (BFE outputs errors with the current dense dataset [Killed]).
- ▶ Using different values for epsilon from 2 to 10m.
- ▶ Results are the same. Dealing with just minor issues about precision.
- ▶ Could we do better to handle maximal cliques when MBC is greater than ϵ ?
- ▶ What is the shape of those cliques?

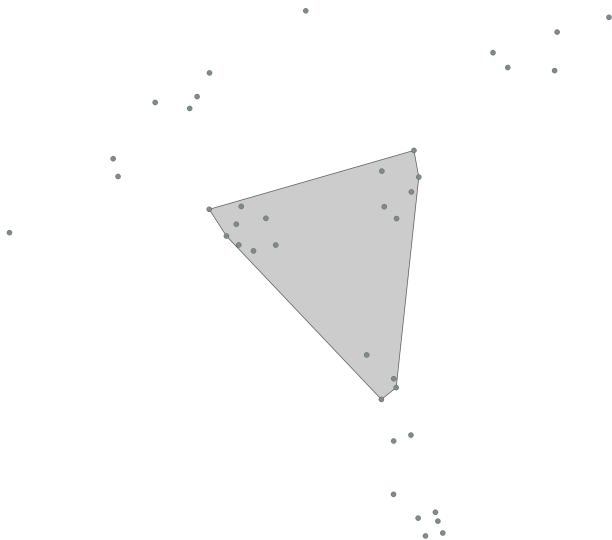
The ‘widest’ shape of a clique



- The challenge will be the position and orientation of the shape...

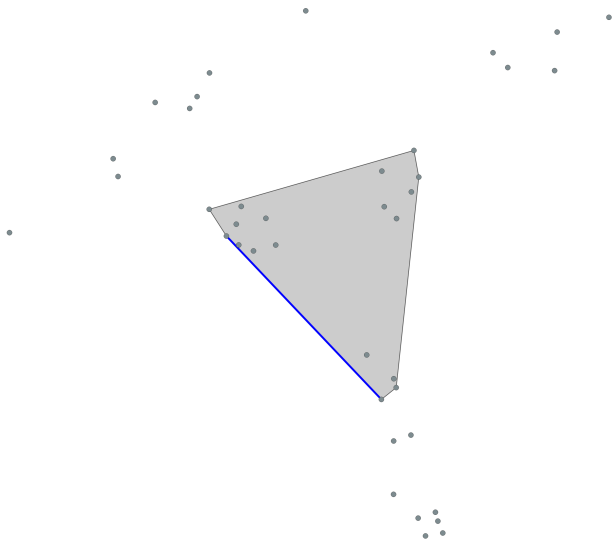
A first attempt...

Given a maximal clique



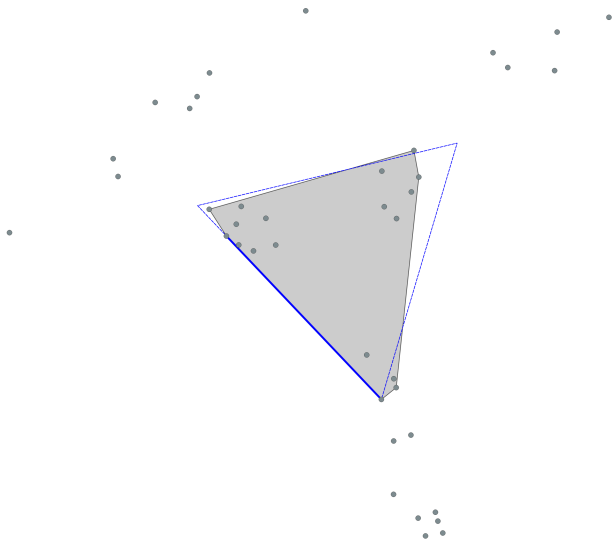
A first attempt...

Find the longest segment



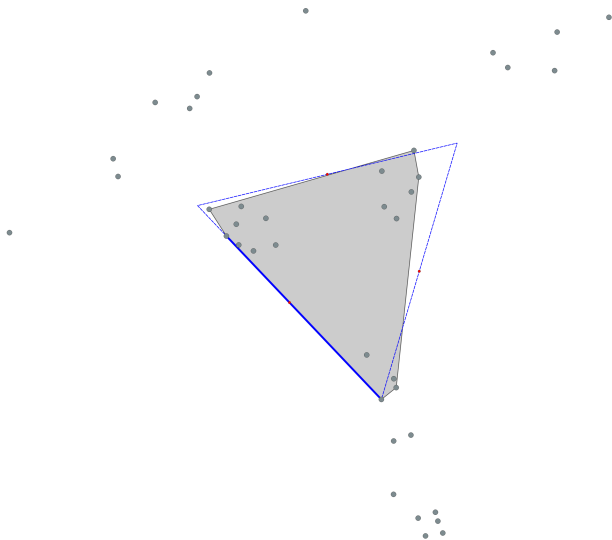
A first attempt...

Trace an equilateral triangle of size ϵ



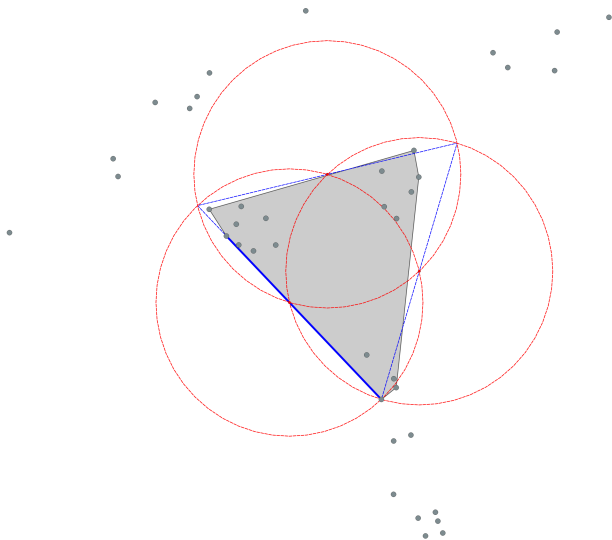
A first attempt...

Locate the centroids of each size



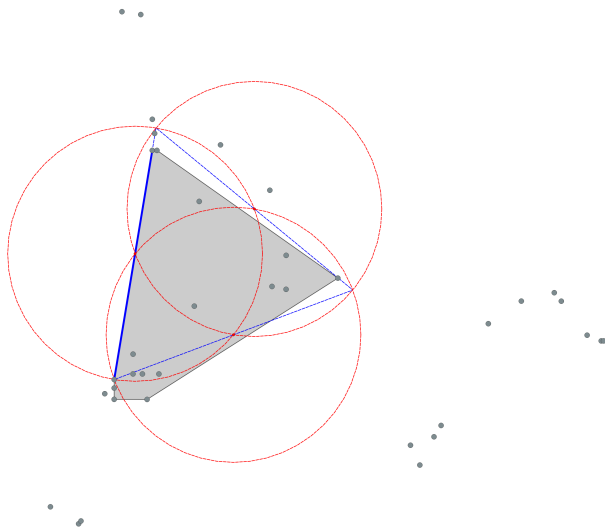
A first attempt...

Draw circles of radius ϵ



A first (and wrong) attempt...

Draw circles of radius ϵ



Work in progress...

- ▶ Position: locate the shape's centroid at the MBC's center...
- ▶ Orientation: align one of the sides of the equilateral triangle parallel to the longest segment in the clique...

