Voronoi Diagram

Representation

- Representing VD

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❖ Basically, constructing the VD for a planar point set means

   to produce a ⎡description⎤ of the VD as a ⎡planar graph⎤ embedded in $\mathcal{E}^2$,

      consisting of the following items

         - the coordinates of all Voronoi ⎡vertices⎤

         - the set of Voronoi ⎡edges⎤, each of which is represented as

            - a pair of vertices, together with

            - 2 pointers to its (CCW) successors at the 2 vertices

❖ Furthermore, we want to, in time ⎡linear⎤ to the edge number,

   - traverse all edges adjacent to a certain ⎡vertex⎤, and

   - traverse all edges bounding a certain ⎡face⎤