

- Voronoi diagram (no construction algorithm)
 - definition
 - sizes
 - Voronoi polygon of a point
 - time for constr. of $V D$ of n points
- Voronoi diagram applications: (no lower bounds)

⇒ Delauney triang.

- * sizes
- * definition
- * how to obtain from $V D$
- * time to compute from $V D$

⇒ nearest neighbor from a point

- * how
- * complexity

⇒ closest pair (nearest pair)

- * how
- * complexity

⇒ all nearest neighbors

- * how
- * complexity

⇒ nearest neighbor search

- * how
- * complexity

⇒ ~~minimum spanning tree~~ EMST

- * how
- * complexity

⇒ $CH(S)$ from $V D$

- * how
- * complexity

⇒ ETSP from EMST

- * how
- * complexity

⇒ smallest enclosing circle

- * how
- * complexity
- * approximation ratio (no proof)

⇒ Largest empty circle
* how
* complexity

- Topologies for Wireless ad-hoc networks

- RNG
 - GG
 - Yao
- } * definition
* construction
* time complexity

- Routing strategies

- Compass
- Greedy
- Most Forwarding
- Nearest Neighbor
- Farthest Neighbor

} ↓
* how to choose
a neighbor to pass
a message towards
destination.

- Intersections

- two convex polygons (construction)
- intersections among n segments

• all intersections } * sweep-line algorithm
or } * complexity
• if there is one-detection

- consequences for problems

- * Polygons intersection test
- * simplicity of polygon test