

Voronoi Diagram

Properties

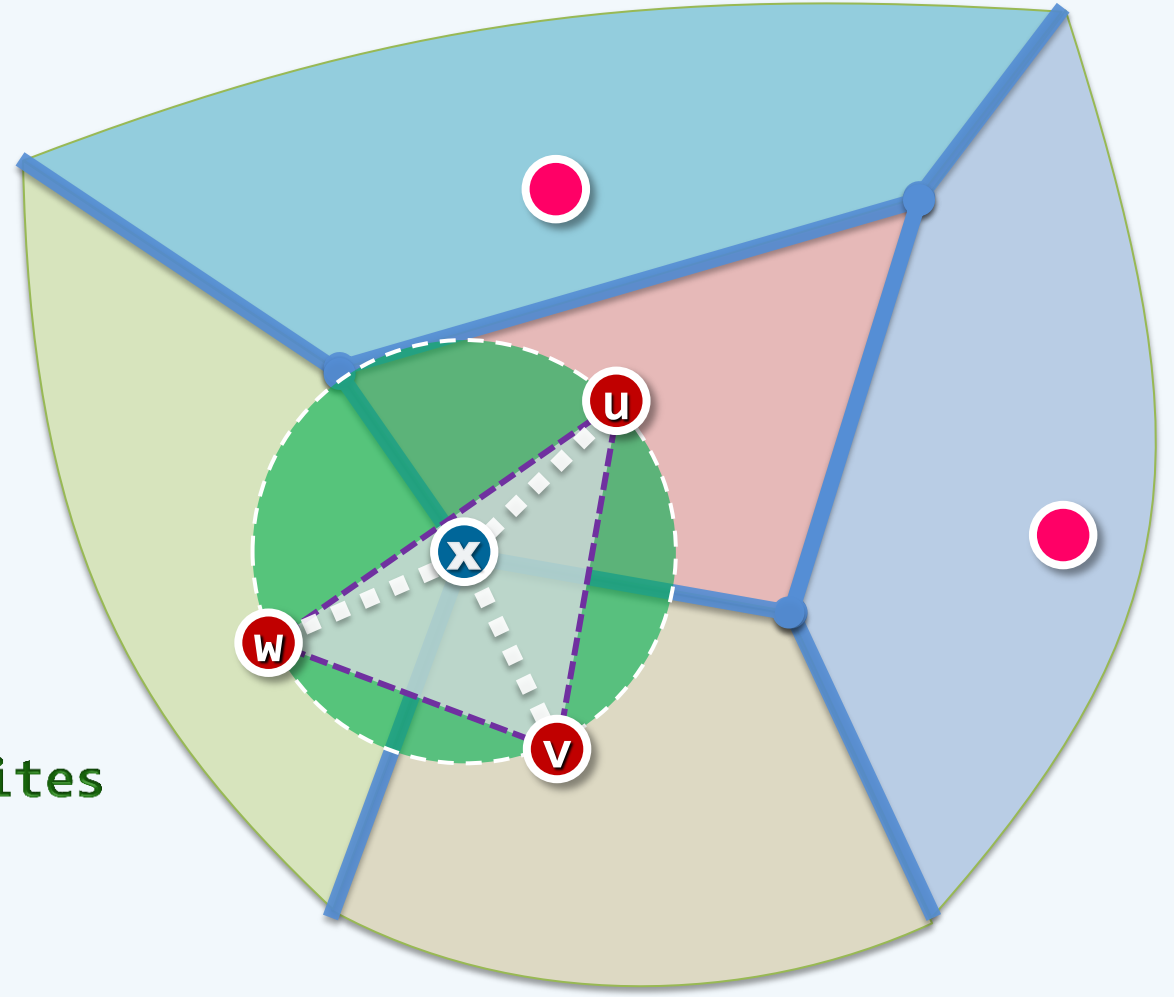
- Number of Nearest Sites = Degree

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Number of Nearest Sites

- ❖ x has 1 nearest site u
iff
 x lies strictly inside $\text{Cell}(u)$
- ❖ x has 2 nearest sites u and v
iff
 x lies on $\text{Edge}(u, v)$
- ❖ x has no least than 3 nearest sites
iff
 x is a Voronoi vertex



Degree

❖ A Voronoi vertex x has d nearest sites iff

x has a degree of d

❖ Every vertex has a degree of 3

if all sites are

in general positions

❖ Give an example that

every vertex has a degree < 4

even there are > 3 concyclic sites

