

# Convex Hull

Divide-and-conquer (1)

- Common Kernel

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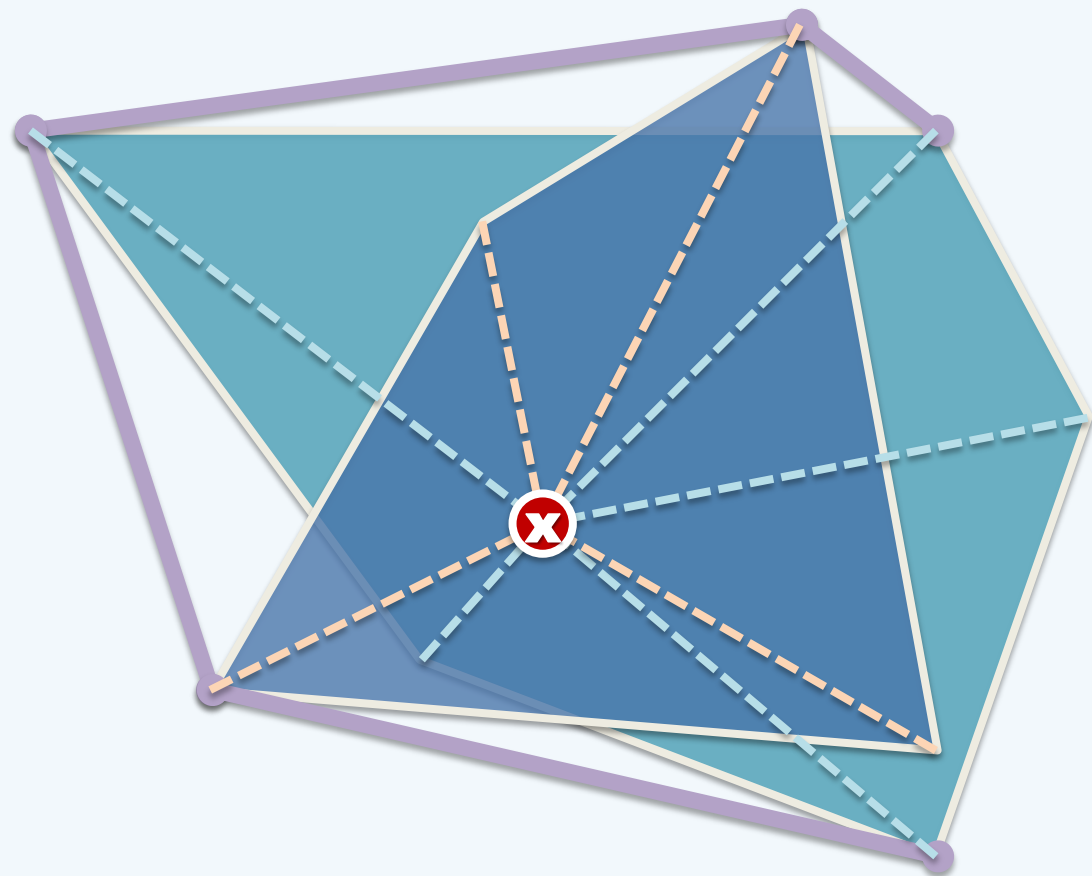
## Star

❖ The idea behind this algorithm is

- to merge the subhulls into a star-shaped polygon before
- applying Graham Scan

❖ That's why

we need a kernel point ...



## Kernel

- ❖ We have known that
  - every convex hull is a star and
  - each interior point is a kernel point
- ❖ Consider  $x$ , the centroid of  $P_1$
- ❖ Does  $x$  lie inside  $P_2$  either?

