

# Convex Hull

## Divide-and-conquer (2)

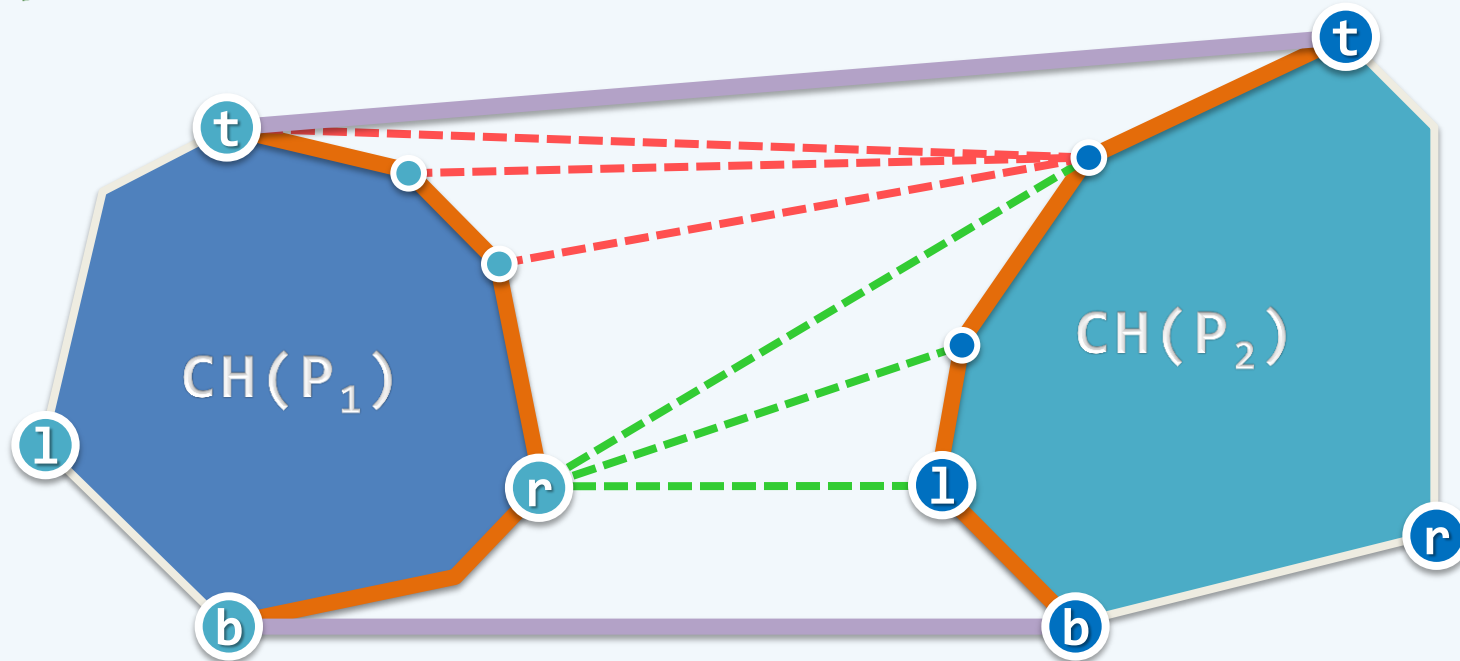
### - More Considerations

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## Degeneracy

- ❖ How if the input points are **not** in general position?
- ❖ For example, there could be ...



- 3 collinear points, or
- 2 points lying on a vertical line

## Output Sensitivity

- ❖ Regardless of the `output size`,  
this algorithm always begins with an `x-sorting`,  
which costs  $\Omega(n \log n)$  time in the worst case

