

Convex Hull

Jarvis March

- Output Sensitivity

Junhui DENG

deng@tsinghua.edu.cn

Output Sensitivity

- ❖ We spend $\mathcal{O}(n)$ time on each EE
- ❖ But how many EE's would there be?

It depends!

- $\mathcal{O}(n)$ in the **worst** cases and
- $\mathcal{O}(1)$ in the **best** cases

- ❖ More specifically,

GW runs in $\mathcal{O}(nh)$ time, where $h = |\text{CH}(S)|$

- ❖ Can we construct the convex hull **faster**?

What's the **lower bound** for CH?

