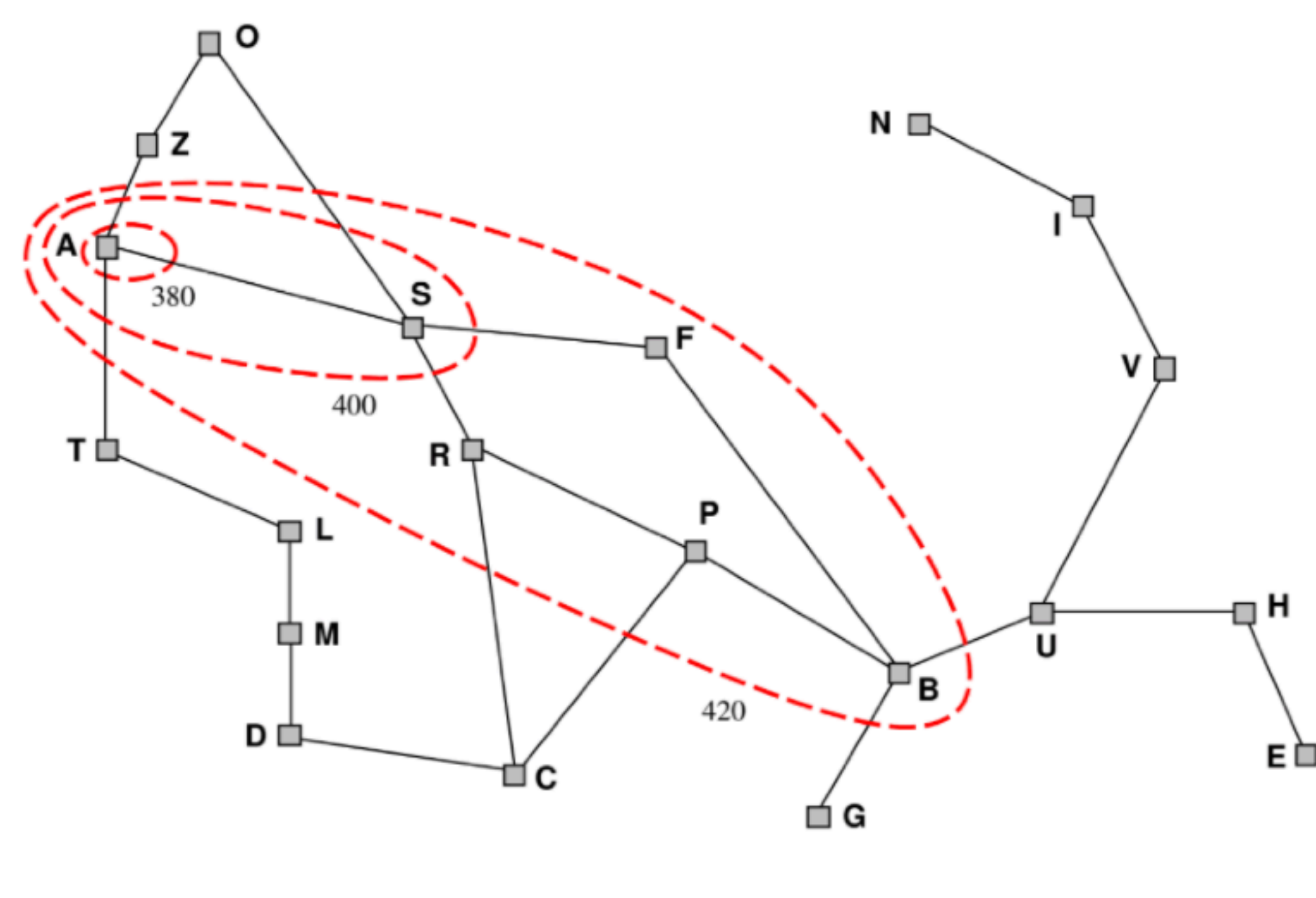


# Sample complexity

- $f = g + h$  contours
- Complete if  $n : f(n) \leq f(G) = f^*(G)$  finite
- Space complexity  $|\{n : f(n) \leq f(G) = f^*(G)\}|$
- Time complexity:  $f(S)$  increase to  $f(G) = f^*(S)$
- $\tilde{O} \left( b^{(f^*(S) - f(S))/\varepsilon} \right)$ , (not covered, skip if you want)
  - $\varepsilon$ : minimal difference between successive  $f$



# Practice

## Real heuristic functions

- $h(a) = 4$
- $h(b) = 2$
- $h(c) = 4$
- $h(d) = 4.5$
- $h(e) = 2$

