

A different formulation of the A* algorithm

- Put the start node on a list OPEN
- Create an empty list CLOSED
- Repeat:
 - If OPEN is empty, return failure
 - Select the node N from OPEN with lowest $f(\cdot)$ value
 - Remove N from OPEN and add to CLOSED
 - If N is the goal, return success
 - Find the children C of N
 - For each child $c \in C$:
 - * if c is not on OPEN or CLOSED, add to OPEN
 - * if c is on OPEN, update $f(c)$ if necessary
 - * if c is on CLOSED and must be updated, remove c from CLOSED and add to OPEN