

→ A* algorithm:

Function A* search (problem) returns a solution or failure

node \leftarrow a node n with n -state: problem-initial state, $n.g = 0$

frontier \leftarrow a priority queue ordered by ascending g^n , only element n .

loop do

if empty? (frontier) then return failure

$n \leftarrow \text{pop}(\text{frontier})$

if problem.goal test (n .state) then return solution(n)

for each action a in problem.actions(n .state) do

$n' \leftarrow \text{child node}(\text{problem}, n, a)$

insert ($n'.g(n') + h(n')$, frontier)

~~CCB~~
~~A3~~
~~X-10~~