

A Algorithm	AO Algorithm
A is a best-first search algorithm that combines the cost of reaching a node from the start node and the estimated cost of reaching the goal from that node. It selects the node with the lowest total cost for expansion.	AO^* is an adaptive version of A^* that incrementally updates heuristic estimates during the search process. It adjusts heuristic estimates to minimize the error between the estimated cost and the actual cost.

2. AO algorithm and ^{under}estimation
- AO algorithm only guarantees optimality when heuristic values are underestimated.
 - If heuristic values are overestimated, AO^* algorithm may not converge to the optimal solution.
 - This is because AO^* relies on heuristic estimates to guide the search and overestimation can lead to premature pruning of potentially optimal paths.