1 Search

Total cost = Time to find a solution (off-line cost) + Cost of the solution path (on-line cost).
Strategy evaluation criteria:

- Completeness: does the strategy guarantees to find a solution if one exists?
- Time complexity: how long does it take to find a solution?
- Space complexity: how much memory is needed to carry out the search?
- Optimality: does the strategy find the best solution when there are more solutions?

2 Swarm intelligence

TODO

3 Games

TODO

4 Constraint Programming

TODO

5 Algorithms

b	branching factor
d	solution depth
m	maximum depth of the search tree
l	depth limit

Name	Complete?	Optimal?	Time complexity	Space complexity	Notes
Non-informed search strategies					
Breadth-First	Yes	Yes	b^d	b^d	
Uniform-Cost	Yes	Yes	b^d	b^d	
Depth-First	No	No	b^m	bm	
Depth-First, limited depth	If $l \geq d$	No	b^l	bl	
Iterative Deepening	Yes	Yes	b^d	bd	
Informed search strategies					
Best-First	No	No	b^d	b^d	
A*	Yes	If heuristic is optimistic			
Local search					
TODO	TODO	TODO	TODO	TODO	
Swarm intelligence					
TODO	TODO	TODO	TODO	TODO	
Games					
Min-Max	Yes	Yes	b^m	bm	
Min-Max, α/β pruning	Yes	Yes	$b^{\frac{3}{4}d}$	TODO	
Constraint programming					
TODO	TODO	TODO	TODO	TODO	