

# Search Strategies

Which search algorithm one should use will generally depend on the problem domain.

There are four important factors to consider:

- **Completeness**— Is a solution guaranteed to be found if at least one solution exists?
- **Optimality**—Is the solution found guaranteed to be the best (or lowest cost) solution if there exists more than one solution?
- **Time Complexity** – The upper bound on the time required to find a solution, as a function of the complexity of the problem.
- **Space Complexity** – The upper bound on the storage space (memory) required at any point during the search, as a function of the complexity of the problem.