metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

Goal-Based Agents

Work towards a goal, considers impact of actions on future states

Searches through possible set of solutions

-Search Agents (Problem Solving Agents)

Moves btw different states of environment

Uses atomic rep. – states are atomic

Finds sequence of actions

Not find path on the fly, finds in mind then execute

**Formulate, search, execute**

States

Initial 🡪 Goal (just find a path)

Environment Assumptions

Search Tree – models the sequence of actions

State space:physical Search space:possible solutions (abstract

Root=initial Branch=action Node=result from action

Expand function: creates all childrens of a node

Nodes can repeat(in antalya twice) – aslında tekrarlanan bir statedir

States can not repeat(in antalya)

Search Space Regions

1.Explored(Closed,Visited)

2.Frontier(Open,Fringe)

3.Unexplored

Uninformed Search Strategies

\*no knowledge about domain

BFS – expand shallowest node - queue - complete but space is huge

DFS – not optimum, not complete, space good

DLS (depth limited) – limit solutionun depthine eşit olmalı

Küçük olursa incomplete, büyükse nonoptimal

ITS (Iterative deepening) – dfs incompletese limiti 1 artır

When search space is large and depth unknown

Hybrid – BFS until reach the end of the memory + ITS

UCS (Uniform **Cost**) – expand cheapest node g(n) – priority queue(heap)

Bfs çözümü bulursa okey diyip bırakıyor ama ucs düşük costu aradığı için time complexity fazla oluyor

Bidirectional – 2 search aynı anda biri forward biri backward, middleda birleşiyor