

Artificial Intelligence 1

Quiz #5 (local and on-line search)

What is the type of problems appropriate for local search techniques?

What is a plateau?

What is the difference between shoulder and plateau?

Is random walk algorithm a complete solving technique?

Is hill climbing a complete solving technique?

Is local beam search equivalent to parallel run of several hill climbing algorithms?

What is the relation between local beam search and genetic algorithms?

What is the equivalent of mutation in hill-climbing?

When is on-line search preferred over off-line search?

What is an adversary argument?

Is there any on-line algorithm that avoids every dead-end?

What will happen if the online DFS algorithm revisits the same state?

What is being learnt by the LRTA* algorithm?

Can we use restart in the online setting? Why?

What does it mean that an action is reversible?

Does an agent need to know what will be the next state in the online setting?

When is environment safely explorable?