

Artificial Intelligence Programming

Uninformed Search

Chris Brooks

Department of Computer Science
University of San Francisco

4-2: Looking Ahead

- In many environments, it can be quite difficult to build reflex agents that act effectively.
- Unable to consider where it is “trying” to go.
- A *goal-based* agent is able to consider what it is trying to do and select actions that achieve that goal.
- Agent program uses percepts and goal as input.
- We’ll look at a particular type of goal-based agent called a *problem-solving* agent.

4-3: Problem-solving agents

- A Problem-solving agent tries to find a sequence of actions that will lead to a goal.
 - What series of moves will solve a Rubik's cube?
 - How do I drive from USF to the San Francisco airport?
 - How can I arrange components on a chip?
 - What sequence of actions will move a robot across a room?