COS402- Artificial Intelligence Fall 2015

Lecture 2: Blind search

Problems and applications

1	8 puzzle	2	Software verification
3	Route planning	4	Theorem proving
5	N-queen problem	6	Medical diagnosis
7	Logistic planning	8	Insurance policy
9	Face detection	10	Speech recognition
11	Optical character recognition	12	Weather forecast
13	Spam detection	14	Stock price prediction
15	Travelling salesman problem		

Problems and applications

1	8 puzzle	2	Software verification
3	Route planning	4	Theorem proving
5	N-queen problem	6	Medical diagnosis
7	Logistic planning	8	Insurance policy
9	Face detection	10	Speech recognition
11	Optical character recognition	12	Weather forecast
13	Spam detection	14	Stock price prediction
15	Travelling salesman problem		

Outline

- **Theme of problem solving in AI**

- **Formulate/define a search problem**

- **Search strategies/algorithms**

  - *Breadth First Search*

  - *Depth First Search*

  - *Depth Limited Search*

  - *Iterative Deepening Search*

  - *Bidirectional Search*

Take home questions

- **Can you find a real world problem that can be formulated as a search problem?**

- **In which way is IDS similar to BFS?**

- **What are the challenges in using bidirectional search?**

Announcements

- **W1 will be released today.**