Facultad de Ingeniería en Electricidad y Computación
Artificial Intelligence

Homework # 1. Search Mechanisms:

Work as a group and answer each of the following questions. You must report only one document as a group, and place it in SIDWeb 4.0, section "Trabajos".

DO NOT send the homework via email.

1. For each of the following problems, determine as a group, which search method: BREATH FIRST or DEPTH FIRST would you use? In each case justify the answer and report the conclusions.

    a. A program for playing tic-tac-toe

    b. A program for solving a maze

    c. A program to determine if 2 mathematical expressions are equivalent.

2. As a group, describe what is uninformed and informed search? Give two examples of uninformed and informed search strategy.

3. As a group, discuss and describe which of the search techniques uses the problem specific knowledge beyond the definition of the problem? And explain why?

4. The decision for doing DATA or GOAL DRIVEN search is generally based on the structure of the problem. As a group, discuss and report the conclusions about the characteristics of the structure that the problems should have. Report at least 3 characteristics for data driven and 3 for goal driven search.