CS322 Fall 1999
Module 1 (AI and Intelligence)
Assignment 1

Due: 1:30pm, Monday 13 September 1999.

The aim of this assignment is to learn about what AI applications exist, and to think about what intelligence could mean.

We will discuss this assignment in Monday's class. Please be prepared to play your part in the discussion. Hopefully, we can have a student-led lecture. You are to hand in this assignment at the end of the lecture.

Question 1

Find out about **two** applications of AI (not classes of applications, but specific programs). For each application, write at most one typed page that describes it. You should try to cover the following questions:

- What does the application actually do? (E.g., control a spacecraft, diagnose a photocopier, provide intelligent help for computer users).

- What AI technologies does it use? (E.g., model-based diagnosis, belief networks, semantic networks, heuristic search, constraint satisfaction).

- How well does it perform? (According to the authors or to an independent review? How does it compare to humans? How do they know how well it works?)

- Is it an experimental system or a fielded system? (How many users does it have? What expertise do these users require?)

- Why is it intelligent? What aspects of it makes it an intelligent system?

- [optional] What programming language and environment was it written in? What sort of user-interface does it have?

- References: Where did you get the information about the application? To what books, articles or web pages should others who want to know about the application refer? (The references may extend over a second page).

There are some online resources (available from the cs322 web page) that may be useful, as well as AI conference proceedings and journals.

There will be a bonus mark for finding an application that no one else in the class found.

Question 2

For each of the following, give three reasons why (or why not):

1. A dog is more intelligent than a worm.

2. A human is more intelligent that a dog.

3. An organization is more intelligent than an individual human.

Based on these, give a definition of what "more intelligent" may mean. Use your own words. Be brief.

Question 3

For each question in this assignment, say how long you spent on it. (You can get a bonus mark if you answer this completely). Was this reasonable? What did you learn?

Collaboration and Plaigerism

For this assignment, you may collaborate with fellow students in order to ensure that you have different applications. However, you must list all of the people you collaborate with, and you should ensure that you have different applications.

You must list all of the references you use. If you use a web page, paper, or book, you must reference it. All of the phrasing must be your own. If you want to copy a phrase or a sentence, put it in quotations and give a reference (including page numbers) where we can find it.