AI Techniques A: Continuous Assessment Assignment

John A. Bullinaria - 2003

The continuous assessment component for the AI Techniques A module (which forms 20% of the total assessment for that module) will be based on the following assignment.

You are required to write an essay describing an AI system that you find interesting. This may be one that was discussed or mentioned in the main lectures, or in a guest lecture, or one that you have come across elsewhere. The essay should be between 2000 and 3000 words in length, and include a discussion of the following issues:

- (1) **The AI System:** What does it do? In what way is it "intelligent"?
- (2) *Representation*: How is knowledge/information represented in the system? Why was it chosen to be like that? Could other possibilities have worked equally well, or better?
- (3) **Rules:** To what extent is the system based on rules? Are they implicit or explicit? How are they used?
- (4) **Search:** Does the system rely on some form of search? If so, how does it work? If not, how might the system be improved by including some form of search?
- (5) *Learning*: Does the system learn or adapt? If so, how is it implemented? Could the system be improved by introducing more learning? Could the system work equally as well with less learning?

You are advised to structure your essay under these headings (though not necessarily in this order). Include any diagrams or tables you think appropriate. Remember to include a reference list (or bibliography), and to cite the sources used in writing your essay.

Exercise Session 5 (on 11 November 2003) will be dedicated to discussing this assignment. Some links to helpful web-sites will be provided on the module web-page. Do not be afraid to ask for advice on what would be a suitable AI system to write about!

This essay must be handed in to the School Office by 12 noon on Wednesday 14 January 2004