CS 486/686—Introduction to Artificial Intelligence

Course project

Spring 2003
School of Computer Science
University of Waterloo

Worth: 30% of final grade

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The idea behind the project is to get you to try and tackle any AI problem that you are interested in. This requires you first to think about what kind of intelligent task you would like a computer to perform, and then go to the library (or the web!) to find out what has already been done on your problem. Note that it might be hard work to think about what you are really interested in, but it is crucial for the project remain open ended and in your hands. It is up to *you* to pick a problem you would like to solve, and then discover what it would really take to tackle it successfully. (You might try reading ahead in the course text or visiting the library to get some ideas, or even just thinking for a bit.) The intent of the project is to get you to start off with something interesting and ambitious (i.e. a system that you think would be really neat to build), and through the course of the project learn about the research that is going on in an interesting sub-area of AI, and also (more importantly) how to take a general idea and hone it down to a concrete and doable task. Along the way it is hoped that you will learn useful things, like:

- How to take a poorly defined problem and turn it into a concrete proposal (and then a concrete implementation and test).
- What is involved in solving the specific problem you are interested in, how hard it is to actually succeed.
- How partial progress can be sensibly made on difficult problems (or perhaps how not).
- How to read the computer science literature to find the ideas and techniques that might be relevant to your needs.

Experience in these areas will help you in whatever direction you follow in your professional career. In the end, however, the project is just a chance to learn more about some sub-area of AI that you might be most interested in, as well as create a potentially interesting system.

The project deliverables are:

0. Project statement. Due Thursday, May 29 (in class). Worth 0% of final course grade.
1. Final project. Due Tuesday, July 29 (in class). Worth 30% of final course grade.

Projects must be done in groups of 3 for undergraduate students taking CS 486, and individually for graduate students taking CS 686.