CSE630

Spring 2004

Syllabus

Instructor: Prof. Eric Fosler-Lussier  
Survey of Artificial Intelligence I: Basic Techniques

Time/Place: MWF 8:30 – 9:18AM, UH 082
Instructor: Prof. Eric Fosler-Lussier
Office: 585 Dreese Labs, 292-4890, fosler@cis.ohio-state.edu
Office Hours: Tu 11-12, W 9:30-10:30
Grader: Tianfang Xu, xut@cis.ohio-state.edu
Course Website: http://www.cis.ohio-state.edu/~fosler/courses/cis630/sp04
Course Newsgroup: cis.course.cis630

Course Description:
A survey of the basic concepts and techniques of problem solving paradigms and knowledge representation schemes in Artificial Intelligence (AI).

Course Objectives:
Upon satisfactory completion of the course, the student will:

- Master basic search techniques for problem solving, including systematic blind searches, heuristically guided searches, and optimal searches
- Be familiar with game-tree search methods and the requirements for expert-level game play
- Be familiar with logic and proof as a basis for knowledge representation and automated reasoning
- Be familiar with semantic nets and frame systems as knowledge-representation formalisms
- Be exposed to problems in common sense reasoning and language understanding
- Be exposed to integrated AI architectures as a platform for building AI systems
- Be exposed to machine learning techniques and the kinds of problem they solve

Prerequisites: CSE 222 and Math 366


In order to make our classroom time more meaningful, you are expected to read the required readings beforehand.

Policy on Academic Misconduct: As with any class at this university, you are required to follow the Ohio State “Code of Student Conduct.” If you are unfamiliar with this policy, you should read it at http://oaa.osu.edu/codem/code.html. In particular, you should note that you are not allowed to, among other things, (a) knowingly provide or receive information during exams, (b) knowingly provide or receive assistance on homeworks unless I say it’s OK, and (c) submit plagiarized (copied but unacknowledged) work for credit. If any violation occurs, I am required to report the violation to the Council on Academic Misconduct.

Announcements: Announcements will be made via the course website. I will also monitor discussions on the cis.course.cis630 newsgroup and answer as appropriate, but I see this more as a forum for you all to discuss topics from class.
Coordination with 12:30 PM section: The lectures for this section and the Dr. Byron’s 12:30 PM section will be coordinated. The homeworks for each section will be the same, and we will be using the same grader. The exams, however, will be necessarily different.

Grading Plan: The following are the approximate weights for each of the work components of the course. Final grades will be determined from the distributions of weighted scores.

Exams: (55% total) Preliminary Exams I & II: 15% each, Final Exam: 25%
Excuse from scheduled exams will not be accepted without substantial documentation.

Preliminary exams will cover topics outlined in the class calendar (on the website); the final exam will be comprehensive.

Preliminary Exam I: Friday, 23 April 8:30 AM – 9:18 AM
Preliminary Exam II: Friday, 14 May 8:30 AM – 9:18 AM
Comprehensive Final Exam: Monday, 7 June 7:30 AM – 9:18 AM

Homeworks: 5x8% = 40%
There will be six homework assignments, some written and some programming. The grade from the lowest homework assignment will be dropped; this means that you can miss one homework assignment with impunity. Homeworks are due at 11:59:59 PM on the day that they are due. Late homeworks will not be accepted.

Class participation/minute quizzes: 5%
Participation is an important part of your educational experience in this class, so 5% of your grade will be determined by your participation. Corollary: if I don’t know who you are, I won’t be able to give you full credit! Also, I plan to have a few “minute quizzes” to make sure that you’re keeping up with the readings. This will help quieter folks to redeem yourselves in this category. Make sure to have a blank piece of paper handy each class just in case I call a quiz.