CPSC 420-502 Artificial Intelligence: Fall 2002

Syllabus

NEWS: 9/1/03, 11:53AM (Mon)

1. [Posted 9/1] First class tomorrow 9:35am, ZACH 105B

[ Read-Only Bulletin Board: 9/1/03, 06:02PM (Mon) ]

Keep an eye on this news box for the latest.

Last modified: 9/1/03, 10:11PM Monday.

I. General Information

Instructor:

Dr. Yoonsuck Choe
Email: choe@tamu.edu
Office: HRBB 322B
Phone: 845-5466
Office hours: T/FR 12pm-1:30pm (other times: by appointment).

TA:

Subramonia P. Sarma
Email: sps8556@cs.tamu.edu
Office: HRBB 322A
Phone: 845-xxxx
Office hours: TBA

Prerequisite/Restrictions:

CPSC 311

Lectures:

T/TR 9:35am-10:50am, ZACH 105B

Goals:

To understand the problems in AI and to learn how to solve them:
1. traditional AI techniques (search, pattern matching, logical inference, theorem proving, etc.).
2. modern approaches in AI (learning, probabilistic approaches, etc.).

Textbook:


Book Homepage

Computer Accounts and Usage:

1. Computer accounts: if you do not have a unix account, ask for one on the CS web page. We will be using the GNU Common Lisp as our main language. You can choose your own language to use for the assignments, but you have to first get permission from the instructor.
2. GNU Common Lisp:

   Details will be made available as soon as CSG makes GCL available on the unix machines.

Topics to be covered:

See the Weekly Schedule section for more details.

1. Introduction : 1 week
2. LISP : 1 week
3. Search : 1.5 weeks
4. Game Playing : 0.75 week
5. Propositional Logic, First-order logic: 3.5 weeks
6. Uncertainty : 1 weeks
7. Learning : 2.5 weeks
8. Special Topics : 1 week

Grading:

1. Exams: 45% (midterm: 20%, final: 25%)
2. Homeworks (about 3): 15%
3. Programming Assignments (about 3): 36%
4. Paper comments (about 1): 4%

Grading will be on the absolute scale. The cutoff for an ‘A’ will be at most 90% of total score, 80% for a ‘B’, 70% for a ‘C’, and 60% for a ‘D’. However, these cutoffs might be lowered at the end of the semester to accomodate the actual distribution of grades.

Academic Dishonesty:

The TAMU student rules (http://student-rules.tamu.edu/), Part I Rule 20 will be strictly enforced. To quote from the page, the following are unacceptable. See the same page for your rights.

- **Acquiring Information:** Acquiring answers for any assigned work or examination from any unauthorized source. Working with another person or persons on any assignment or examination when not specifically permitted by the instructor. Observing the work of other students during any examination.
- **Providing Information:** Providing answers for any assigned work or examination when not specifically authorized to do so. Informing any person or persons of the contents of any examination prior to the time the examination is given.
- **Plagiarism:** Failing to credit sources used in a work product in an attempt to pass off the work as one’s own. Attempting to receive credit for work performed by another, including papers obtained in whole or in part from individuals or other sources.
• **Conspiracy:** Agreeing with one or more persons to commit any act of scholastic dishonesty.
• **Fabrication of Information:** The falsification of the results obtained from a research or laboratory experiment. The written or oral presentation of results of research or laboratory experiments without the research or laboratory experiment having been performed.
• **Violation of Departmental or College Rules:** Violation of any announced departmental or college rule relating to academic matters, including but not limited to abuse or misuse of computer access or information.
• **Falsification of Information:** Changing information on tests, quizzes, examinations, reports, or any other material that has been graded and resubmitting it as original for the purpose of improving the grade on that material.

Local Course Policy:

• All work should be done individually and on your own unless otherwise allowed by the instructor.
• Discussion is only allowed immediately before, during, or immediately after the class, or during the instructor’s office hours.
• If you find solutions to homeworks or programming assignments on the web (or in a book, etc.), you may (or may not) use it. Please talk to the instructor first for permission.

II. Resources:

1. LISP quick reference
2. GCL manual (very in-depth and technical).
3. GNU Common Lisp
4. Lisp resources
5. My general resources page

III. Weekly Schedule and Class Notes

• **Lecture notes (in PDF format):** all notes will be uploaded in this directory.
• It is your responsibility to download, print, and bring the notes to the class. Notes will be available 24 hours before each class.
• See the 2003 Fall TAMU Calendar for breaks, etc. December 9 (Tue) is the last class day.
• When reading the chapters, you do not have to memorize everything. A separate list of terms you need to know will be handed out prior to each exam.
• All reading material below refers to the AIMA book 2nd edition. The (old XX) tags next in the Reading field are the corresponding chapters in the old AIMA book (1st edition).
• More detail will be available as we go along.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
<th>Assignments</th>
<th>Notices and Dues</th>
<th>Notes</th>
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<td>Introduction</td>
<td>Chapter 1 1.1 and 1.2</td>
<td>First day of class</td>
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<td>9/4</td>
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<td>Unix basics</td>
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<td>Search and Game Playing</td>
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* * Credits *

Many ideas and example codes were borrowed from [Gordon Novak’s AI Course](http://courses.cs.tamu.edu/choe/03fall/) and [Risto](http://courses.cs.tamu.edu/choe/03fall/).
Miikkulainen’s AI Course at the University of Texas at Austin (Course number CS381K).