EECS 391: Introduction to AI

Instructor: Soumya Ray
Meeting in Bingham 103, TR 10-11:15
Today

• Course mechanics
• SEPIA tutorial
• Discussion on AI
Course Website

• [http://engr.case.edu/ray_soumya/eecs391_sp16/](http://engr.case.edu/ray_soumya/eecs391_sp16/)

• All notes, assignments, announcements will appear here, please check regularly

• I will also post course materials on Blackboard
Textbook

• “Artificial Intelligence: a modern approach”, by Stuart Russell and Peter Norvig, 3 ed.
  – Available online (link on website)

• I will provide supplementary materials as needed
Syllabus

• Four broad areas
  – Problem solving with Search
  – Logic and Automated Planning
  – Probability and Machine Learning
  – Decision Making Under Uncertainty

• Detailed list of lectures and chapters are on the website

• We will cover a large portion of the textbook
Office hours and TAs

• M 12:30-2, Olin 516, or by appointment

• TAs to be announced next week

• Two or three mentors may also be available for consulting on questions
Email

• Announcements to the class or messages to individual students will go to your “official” address in SIS

• My email address is sray@case.edu

• Contact info of TAs/mentors will be on website

• Please put EECS 391 in the subject
  – E.g. “EECS 391: Question about homework 1”
Communication

• Please feel free to ask questions in class if something is not clear
  – Or come to office hours
  – Or visit TAs/mentors
  – 5% of the grade is reserved for class participation

• But don’t sit quietly and hope you will miraculously understand---you might not
  – Your friends probably don’t understand either if you don’t
Assignments

• Regular reading, homework assignments, programming assignments

• Reading assignments will be chapters from text or supplementary material
  – I will expect you to know this material
  – Will generally supplement/give details about what is covered in class
  – If you read these before coming to class you will enjoy the class much more
Written Assignments

• One written homework about every three weeks (5 total)

• Will be posted on website and announced in class

• Due by midnight on due date
Programming Assignments

• One programming assignment every three weeks (4 total)

• To be coded in Java

• We will use Blackboard for submission
Programming: SEPIA

• We will use a strategy game as a framework for the programming assignments
  – Strategy Engine for Programming Intelligent Agents
  – Similar to Age of Empires, Warcraft, Starcraft etc, but modified for teaching and research
  – Developed by students here

• You will write code for players (“agents”) that will learn to play (parts of) this game
Late Policy

• Assignments will need to be turned in to Blackboard by midnight on the due date
• Late assignments will lose credit @ 10% for each late day
• If you have a genuine reason, such as illness, please see me and ask for an extension
Collaboration policy

• All written and programming assignments can be done in pairs with no penalty
  – Each pair submits one assignment
  – Both individuals receive the same grade
  – This is recommended
  – Choose a partner to complement your skills
Collaboration Policy

• You are free (and encouraged) to talk to fellow students, TAs/mentors and me about assignments to clarify/refine your ideas

• But your submitted work MUST be substantially your own
  – Do not copy from any source including any online sources
  – Do not put your name on an assignment where your partner did most of the work
Quizzes

• There will be five quizzes in class, one after each homework on the topics of that homework
  – Dates and topics will be on the course web page
  – The last quiz is cumulative

• There are no “midterms” or “finals”
  – But there will be quizzes around those times
Late Policy (2)

• We will post the solutions of written assignments the evening before the respective quiz
  – If you turn in the homework after that you lose an additional 50% of your grade
Tentative Grade Distribution

- Homework 30%
- Programming assignments 30%
- Quizzes 35%
  - Of the 5 quizzes, I will take the best 4
- Class Participation: 5%
Course Load

• Quite high
• I recommend setting aside about 6-8 hours each week to work on this course (besides class hours)
• Do timely work
• I recommend not taking more than 2 other 300-level (or higher) courses with this course
Ideal Background

• Mathematics: a little calculus, linear algebra and some exposure to logic

• Computer Science: all fundamentals including algorithms, data structures, programming

• Some exposure to probability and statistics
Reading assignment

- Please read chapters 1 and 2 of the textbook
Class composition

- (waiting list)
- (non-EECS majors)
Questions?
SEPIA tutorial