CS 604: Artificial Intelligence
Fall 2018

Syllabus

1. **Instructor**: Shrisha Rao <srao@iiitb.ac.in>
2. **Class Time**: 11:15 AM – 13:15 PM Monday, Wednesday.
3. **Description**: This is a *seminar* course in artificial intelligence, with students expected to do a lot of independent reading and presentations in class. There will be no conventional examinations, but some assignments will be given, and a student will be required to complete a project, and/or write a paper, on a chosen topic. There is no specific textbook, but readings may be assigned.
4. **Caveat Emptor**: This course will be most interesting to students interested in research and open-ended learning, much less if a student wishes for a highly-structured course with fixed content.
5. **Areas Covered**: see projects list and readings.
6. **Prerequisites**: This course requires a significant understanding of mathematics and theoretical CS (algorithms, automata theory, etc.). Tt is required that students demonstrate having such background. The formal prerequisites are:
   - (For iMTech students:) CS 551: Introduction to Automata Theory and Computability, with a grade of B or better.
   - (For MTech students:) CS 601: Theory of Computation, with a grade of B or better.
7. **Course Objectives**:
   - To give students a chance to appreciate the theory and applications of artificial intelligence.
   - To enable students to mature professionally by interacting as independent, peer learners with good communications skills.

8. **Milestones**: (indicative, subject to minor changes)

    - August 1–September 19: each student/team to give a 10–15 minute presentation on chosen topic.
    - October 1–November 21: each student/team to give a more in-depth, 1-hour presentation on chosen topic.
    - September 17: first draft of paper, giving survey and proposal related to topic due, from all students. (Minimum of 20 references, at least 10 to be discussed *in extenso*.)
    - October 24: second draft (in more depth) due from all students.
    - Late November: one round of reviews of other students' presentations and writing.

9. **Students' Responsibilities**:

    - Attend all classes and participate actively in them, including making required presentations. More than two absences (except for leave granted by the Institute for valid reasons such as medical crises) will cause an automatic drop in grade.
    - Study assigned materials and find and study other relevant material.
    - Satisfactorily review, orally and in writing, the work of other students.
    - Choose an individual project/research topic in consultation with the instructor, work on it satisfactorily, and report the results in class presentations and a research paper.

10. **Grading**: Letter grade of A–D, F. (NB: + and − will generally not be used.)

srao@iiitb.ac.in, 17:04, Tuesday 31st July, 2018.