Course Syllabus

Course Information

Course Prefix and Number: CS 8803
Credit Hours: 3
Instructor: Anand Padmanabha Iyer

Course Description

This is a class that deals with advanced topics in the field of systems and AI. The course will focus on the systems that have enable modern-day AI. In particular, we will study the latest advances in system design that make generative AI possible and how the breakthroughs in generative AI have influenced how we design systems.

Course Learning Outcomes

By enrolling in this course, students will:

1. The goal of this course is to equip the students with an understanding of the state-of-the-art in systems for AI by a combination of a reading and discussing several research papers in top-tier conferences in the field and performing original research through a substantial research project.

Required Course Materials

This course has **no** textbooks or exams. The course content will be based on recent papers from top venues in the areas of systems and AI.

Grading Policy

This course is graded on a standard letter scale (A – F). Being a research oriented course, the majority of the grade will be allocated for the course project. It is the joint responsibility of the instructor and the student to discuss expectations and how meeting or not the expectations affects the final grade. The research project undertaken by the student in this course must be approved by the instructor. The instructor's decision in all the aspects of the course will be final.

- A grade of A indicates that the student has (a) made significant contributions to the in-class learning experience by attending all lectures and participating in discussions, and (b) completed and delivered on the research project with quality equivalent to a publication at a top systems conference.

- A grade of B indicates that the student has (a) made contributions to the in-class learning experience by attending lectures and participating in discussions, and (b) completed and delivered on the research project with high quality, yet with some deficiencies such as not meeting expectations regarding deliverables.
- A grade of C indicates that the student has made some progress towards the course, yet with substantial issues such as not meeting the quality required of deliverables, deadlines, etc.
- A grade of D or below indicates that the student did not meet the expectations for satisfactory performance during the term.

Attendance Policy

Given the discussion-based nature of this course, participation is required both for the student's own understanding and to improve the overall quality of the course. Students are required to attend all lectures.

Academic and Research Honesty/Integrity Statement

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. Review the Student Code of Conduct and the Academic Honor Code, especially Appendix A: Graduate Addendum to the Academic Honor Code.

Students are expected to perform research in an ethical and responsible manner. All Doctoral and Master's Thesis students are required to take the Responsible Conduct of Research training, and it is expected that students abide by the principles taught in that training while performing research.

Any student suspected of cheating or plagiarizing on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Allegations of scientific or scholarly misconduct are handled in accordance with the procedures outlined by the Policy for Responding to Allegations of Scientific or Other Scholarly Misconduct.

Core IMPACTS

Not applicable

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Student-Faculty Expectations

At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. The Student-Faculty Expectations articulates some basic expectations that you can have of me and that I have of you. Additional information for research-related work is given in The Expectations of Advisors and Advisees. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.