

CS 8803 Syllabus

Special Topics: Human-AI Interaction | Section A | 3 Credit Hours

Instructor Information

Instructor: Christopher MacLellan

General Course Information

Description

Artificial Intelligence (AI) applications are widespread and already transforming nearly every aspect of society. As AI becomes more broadly embedded in technologies that interact with and affect everyday people, it is increasingly important to consider human-AI interaction design as part of the AI system development process. This class introduces the unique design challenges presented by AI. It explores questions of usability and user experience specific to AI systems, and it reflects more broadly on the relationship between humanity and emerging technologies. Students will practice skills in design, research and writing regarding the human side of AI. Topics include AI and society, interactive system design, speculative design, fairness, explainability, human augmentation/amplification, etc. No programming experience required.

Course Learning Outcomes

As a result of your experience in this course, you will be able to: (1) Develop a deep understanding of what human–AI interaction (HAI) is, including its foundations, current issues, and future potential. (2) Cultivate a critical mindset for thinking about AI, HAI, and related topics, that will enable you to more successfully navigate research and practice within the HAI space. (3) Develop your metacognition and your ability to learn about learning, so that you can manage your own learning and success. (4) Explain the design challenges that AI systems present. (5) Evaluate the arguments for and against the application of AI in various aspects of human society and participate in public discourse on these topics. (6) Advocate for AI applications and design choices you care about using the knowledge and skills gained in this course, such as ensuring fairness and accessibility in AI systems.

Required Course Materials

There is no required textbook in this course. We will read several articles each week, but these will be made available freely.

Grading Policy:

Grades will be based on completion of readings, class activities, essays, and reflective learning self-assessments. A≥90; B≥80; C≥70; D≥60; F<60.

Assignments

- Readings
 - Class activities
 - Essays
- Reflective learning self-assessments

Description of Graded Components

The primary activity for the course will be reading and discussion. Students will complete readings before class, participate in class activities, write short essays, and complete reflective learning self-assessments.

Course Policies

Attendance and/or Participation

Evidence suggests that time spent actively and deliberately engaging with content is directly correlated with learning (see Chi's ICAP Framework). We will utilize class time to discuss the readings and class topics as a group. I expect you to complete the readings each week, post on Ed discussion something about the paper, and to come to every class ready to discuss the papers, what you posted, and to engage in group activities.

Academic Integrity

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 Georgia Tech's Honor Code](#) and the [student Code of Conduct](#).

Any student suspected of cheating or plagiarism 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.

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](#) (404-894-2563) 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 Agreement

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](#) articulate some basic expectations that you can have of me

and that I have of you. 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.