CS 6998 Syllabus

HCI Masters Project, Section A08, 3 Credits

Spring 2027

Instructor Information

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General Course Information

Description

The HCI Masters project is a blend of research and design efforts intended as an assessment of knowledge and skills acquired throughout the program. There is freedom for great diversity in project topics and options for investigating, designing, and/or developing artifacts that are relevant to HCI. Artifacts can be physical, digital, process/method, knowledge, or combinations of these forms (and perhaps others). Because there is a range of acceptable project contexts, your project may not follow a"typical" project path. However, students must take a user-centered perspective as well as ensure that they interact with individuals in the target user group, appropriate representative users, and/or stakeholders during the project. All projects are required to demonstrate evidence-based decision making from start to finish. Therefore, a critical objective is for students to engage in activities that generate evidence to inform and reflect on design or knowledge that is relevant to HCI.

The most common approach is to focus on designing and evaluating an artifact (software, hardware, conceptual framework of behavior, service process, etc.) based on the needs/wants of a specific group of people. Projects generally start with needs analysis or discovery activities in order to investigate the problem or design space, identify user needs, and define design criteria. This "research" can take many forms, and may be lightweight or more thorough, depending on the specific project. Next, students enter an ideation phase that includes pitching, sketching, storyboarding, and/or wireframing to demonstrate and get feedback on their concepts. There may be

some additional formative research and design efforts, in order to iteratively refine the prototype. The final (or most advanced) prototype must be evaluated to validate your design decisions and suggest improvements.

Course Learning Outcomes

Learning in this project will occur by completing the work of the project. You are expected to work actively on your project during each semester you register for credits. As a general guideline, one credit hour equals roughly three hours of work per week, resulting in 9+ hours per week for 3 credit hours of project work. *This translates to about 145-175 hours per semester for your project*.

By completing this project, you should be able to:

- Develop a focused problem space
- Conduct common research methods
- Interpret and analyze research findings to inform design decisions or directions for further investigation
- Produce and/or investigate artifacts through an iterative and evidence-based process
- Evaluate/validate your artifact
- Document and communicate findings to demonstrate the evidence-based process

Required Course Materials

There is no specific required text for your project. However, you are required to conduct a comprehensive review of pertinent existing information (e.g., literature, competitive products, data, processes, etc.).

Description of Graded Components:

The following information about gradable aspects of the project is excerpted from the MS-HCI Project Requirements document:

Progress Reporting: During both semesters of your project credits, you will be expected to make satisfactory progress on your project. To report on your progress, you will provide your faculty advisor with periodic updates according to his/her preferred methods (e.g., reporting during lab meetings, demonstrations, written reporting documents, etc.). You must also:

- Have an initial meeting with the Research Director and your advisor to review your progress and planned work during the first semester of your project. This will be scheduled for early in the first semester of your project.

Mid-Point Progress Presentation: At the end of your first semester of project work, you will give a presentation to the Research Director, Program Director, and others on your progress to date and plan for completion. You are expected to summarize your efforts towards the 3 credits of project work completed. Your presentation will include a brief overview of your work and future plans, and a faculty-led discussion about your progress and future plans. The outcome of this presentation will be considered as part of your grade for the semester.

Final Deliverables (details are described in the MS-HCI Project Requirements document): In order to graduate, you will turn in a high-quality final report document (or other agreed upon equivalent document) and present your work to the program (i.e., the Program Director, four MS-HCI faculty coordinators, the Research Director, fellow MS-HCI students, other interested faculty members, and invited experts). These deliverables are graded as part of your project credits and must be completed to a level deemed satisfactory by your advisor, the Program Director, faculty coordinators, and the Research Director. The signed project completion form is due by the last day of finals in the semester you expect to graduate. This form should not be signed until all project deliverables have been submitted.

Additional Project Deliverables or Expectations: These might include attendance at lab meetings, project demos, drafts of paper submissions, etc.

Grading Policy

The above components will be assessed and contribute to your grade. At Georgia Tech, final course grades are awarded on a scale of A-F with no +/- grades permitted. 90-100= A; 80-89= B; 70-79= C; 60-69= D; below 60= F. **You must receive an A or B grade to pass this course as required by the MS-HCI Program.**

Course Policies

Attendance and/or Participation

This course does not include scheduled class meetings. The frequency and format of student–faculty contact are determined by mutual agreement and are consistent with the number of credit hours for which the student is enrolled.

NO GEN AI is Permitted

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, or claiming to be in attendance when not in the classroom will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Submitting work produced solely or largely by AI as your own is inconsistent with the academic integrity standards of this course.

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

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.