CS 8903 W13: Special Problems

Summer 2026

Georgia Institute of Technology

Instructor: Anqi Wu
Department: Dept/Computer Science
CRN: 57036
Course Format: Small-group or individual guided study
Meeting Time/Location: By arrangement
Office Hours: By appointment
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Catalog Description

Small-group or individual investigation of advanced topics in computing. Guided study and research.

Course Overview

This course provides an opportunity for small-group or individual investigation of advanced topics in computing under faculty supervision. Students will explore a focused research or technical problem, develop relevant methods, and produce meaningful technical outcomes. The course emphasizes independent learning, critical thinking, and research-oriented problem solving.

Learning Objectives

By the end of the course, students are expected to:

- develop a clear understanding of an advanced topic in computing;
- formulate and investigate a focused research or technical problem;
- apply appropriate computational or analytical methods;
- critically evaluate relevant literature and prior work;
- communicate technical results effectively.

Project Scope

The scope of the special problem will be defined in consultation with the instructor and may include:

- literature review and synthesis;
- algorithm or model development;
- implementation and experimentation;
- theoretical or empirical analysis;
- system design or applied computing tasks.

Expectations

Students are expected to demonstrate initiative, independence, and consistent progress:

- meet regularly with the instructor;
- define clear goals and milestones early in the semester;
- maintain steady progress and documentation;
- incorporate feedback into iterative improvements.

Assessment

Evaluation is based on the quality and completeness of the work:

- Problem formulation and planning: 20%
- Progress and engagement: 30%
- Technical depth and execution: 30%
- Final deliverable (report, code, or presentation): 20%

Deliverables

Deliverables may include:

- a written technical report;
- code, models, or experimental results;
- an oral presentation or demonstration.

Specific deliverables will be determined based on the project.

Attendance and Communication

There are no formal lectures. Regular meetings with the instructor are expected. Students should maintain consistent communication and provide updates on progress.

Late Work

Deadlines will be determined based on the project timeline. Students are expected to communicate proactively regarding any delays.

Academic Integrity

All work must comply with the Georgia Tech Honor Code. Proper citation and attribution are required.

Accessibility and Student Support

Students requiring accommodations should contact the Office of Disability Services and notify the instructor early. Additional academic and wellness resources are available through Georgia Tech.

Institute Policies

All Georgia Tech policies regarding academic conduct, non-discrimination, accessibility, and student behavior apply.

Note: This syllabus provides general guidance for CS 8903. Specific expectations and deliverables will be tailored to each student's project in consultation with the instructor.