CSE 8903 W13: Special Problems

Summer 2026

Georgia Institute of Technology

Instructor: Anqi Wu
Department: School of Computational Science and Engineering
CRN: 56889
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 with a faculty member.

Course Overview

This course provides an opportunity for small-group or individual investigation of advanced topics in computational science and engineering under faculty supervision. Students will engage in focused study or research, developing technical depth and independent problem-solving skills.

Learning Objectives

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

- develop a deep understanding of a specialized topic;
- formulate and investigate a well-defined problem;
- apply appropriate computational or analytical techniques;
- critically analyze relevant literature;
- communicate findings clearly and professionally.

Project Scope

The specific topic and scope will be determined jointly by the student and instructor. Possible components include:

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

Expectations

Students are expected to:

- meet regularly with the instructor;
- define clear goals and milestones early in the term;
- 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. Students are expected to attend regular meetings with the instructor and maintain consistent communication.

Late Work

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

Academic Integrity

All work must comply with the Georgia Tech Honor Code. Proper attribution of prior work is required.

Accessibility and Student Support

Students requiring accommodations should contact the Office of Disability Services and notify the instructor early. Georgia Tech provides additional academic and wellness resources.

Institute Policies

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

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