Thesis Course Syllabus

Course Information

Course Prefix and Number: CS 8741

Course Name: Robotics Capstone Project

Instructor: Ha, Sehoon

Course Description

This course provides academic credit for a significant robotics capstone project conducted under the supervision of a Georgia Tech faculty advisor. The course is designed for students to apply the knowledge and skills acquired throughout their degree program to a real-world robotics challenge. The course does not involve regular class meetings, assignments, or examinations. The scope, direction, and specific deliverables of the project are determined by the student in consultation with the project advisor.

Course Learning Outcomes

By enrolling in this course, students will:

1. Design and integrate complex robotics systems to solve specific technical challenges.
2. Apply critical thinking and engineering principles to real-world robotics problems.
3. Demonstrate effective project management and technical communication skills.
4. Communicate project activity through interactions with their project advisor and final demonstrations.

Required Course Materials

No textbooks or materials are required. Resources, hardware, and software requirements for the capstone project are determined in consultation with the project advisor.

Grading Policy

This course is typically graded on a Satisfactory (S) / Unsatisfactory (U) basis.

A grade of Satisfactory (S) indicates that the student has made acceptable progress in their capstone project, met the agreed-upon milestones, and demonstrated professional-level competency in their final project deliverables.

Attendance Policy

This course does not include scheduled class meetings. Students conduct independent project work under the supervision of a project advisor. The frequency and format of student-advisor contact (e.g., weekly stand-ups, lab meetings) are determined by mutual agreement.

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. Students are expected to perform their capstone project work in an ethical and responsible manner, especially concerning data integrity and collaborative contributions.

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.

Expectations of Advisors and Advisees

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 university articulates 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.