Robotics: AI Techniques

Last Updated: Fri, 01/09/2026

Course prefix: CS

Course number: 7638

Section: O01

CRN
26532 29949

Instructor first name: Jay

Instructor last name: Summet

Semester: Spring

Academic year: 2026

Catalog description:

In this course, you will learn how to program all the major systems of a robotic car based on lectures
from the former leader of Google’s and Stanford's autonomous driving teams, Sebastian Thrun. You
will learn some of the basic techniques in artificial intelligence, including probabilistic inference,
planning and search algorithms, localization, tracking, and PID control, all with a focus on robotics.
Extensive programming examples and assignments in Python will apply these methods in the context
of autonomous vehicles.

Academic honesty/integrity statement:

Students are expected to maintain the highest standards of academic integrity. All work submitted must be original and properly cited. Plagiarism, cheating, or any form of academic dishonesty will result in immediate consequences as outlined in the university's academic integrity policy.

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. For information on Georgia Tech's Academic
Honor Code, please visit https://catalog.gatech.edu/policies/honor-code/ or https://catalog.gatech.edu/rules/18/.

We will report all incidents of suspected dishonesty to the Office of Student Integrity (OSI). Please
refer to the Course policy guidelines document for further details. We actively scan project submissions
with automated means to detect cases of plagiarism or unauthorized collaboration.