History & Ethics

Introduction and Ethics of Computer Science

CS51 – Fall 2026

Welcome!

Instructors

Tzu-Yi Chen
she/her/hers
Edmunds 115
OH: M 2:30-3:30pm, F 9-10:30am
and by appointment

Alexandra Papoutsaki
she/her/hers
Edmunds 222
OH: M 10:30-noon TR 10-noon
and by appointment

Teaching Assistants

Jinyao DeSandies
he/him/his

Marina Eissenstat
she/her/hers

Cyrus Hnasko
he/him/his

Stefanie Nguyen
she/her/hers

Sebastian Pollack
he/him/his

Who are you?

- Preferred name and pronouns
- Year
- College
- Programming experience
  - Concurrently enrolled in CSCI050, or
  - Placed out of CSCI050 after talking with Prof. Chen or Prof. Papoutsaki

Nice to meet you!

What is CS51?

- An introduction to computer science through a survey of fundamental topics and a glimpse into our curriculum.
  - Week 1 and 14: Ethics and History of Computer Science
  - Weeks 1-5: Computer Systems (CSCI105)
  - Weeks 5-8: Mathematical Foundations of Computer Science (CSCI054)
  - Weeks 9-11: Data Structures and Algorithms (CSCI062 and CSCI140)
  - Weeks 11-1: Theory of Computation & Programming Languages (CS101)
  - Weeks 14: Machine Learning (electives)

Some examples of what you will learn

- How computers process and store information and the main components of modern computers
- Not only to write programs but prove their correctness and analyze their running time
- Fundamental data structures to organize data
- Simple computational models
- Origins of computation, influential historical figures that shaped computer science and ethical implications.

How can I succeed in CS51?

- Sleep well the night before, eat, attend class, be on time for class and lab
- Take notes, participate, ask questions, don't stay confused
- Review slides and do practice problems after each lecture
- Start the assignments **early**
- Come to office hours/mentor sessions
- Budget at least 8 hours outside class time
- Read email/Slack for announcements and bookmark course website:
  - https://cs.pomona.edu/classes/cs51/

How can I be a good citizen in CS51?

- Use laptops/tablets/phones/other fancy electronics only for note taking/live coding.
- Be mindful when in office hours/mentor sessions of other students waiting for help.
- TAs are students, too. Respect their time outside mentor sessions.
- We encourage collaboration but we want you to submit your own assignments.

AI Course Policy Tier System

- CS51 is **Tier 1** within the **Computer Science AI Policy Tier System**
- You cannot use AI tools like coPilot, chatGPT, Claude to complete assignments
- You are always encouraged to seek help in office hours/mentor sessions before you turn to AI to help you understand course material or create study guides.
- We monitor assignments for plagiarism.
  - Per Department policy, Academic honesty violations are reported to the Dean of Students. Assignments/grades will receive a zero and half a letter grade is reduced. Second infraction in the course is referred to the Academic Disciplinary Board of the student's college with a recommendation for a failing grade.
- If unsure about what's allowed, talk to us!

Grading summary

- Weekly Assignments: 35%
  - Four free days - can stack on one assignment or use across different assignments.
  - If group assignment, both partners have to use a free day.
  - Let us know **before** the deadline if you will take a late day pass.
- Checkpoint I: 15% (October 7th)
- Checkpoint II: 15% (November 11th)
- Final Exam: 30% (Section I: Thursday, December 17th 2-5pm. Section II: Monday December 14th, at 2-5pm)
  - If traveling, please book your tickets accordingly to avoid conflicts.
- Lab Attendance: 5%
  - You have to attend lab in person to receive credit. Can skip one lab, no questions asked.
  - Assignments will start with deliverables due **at the beginning of each lab.**

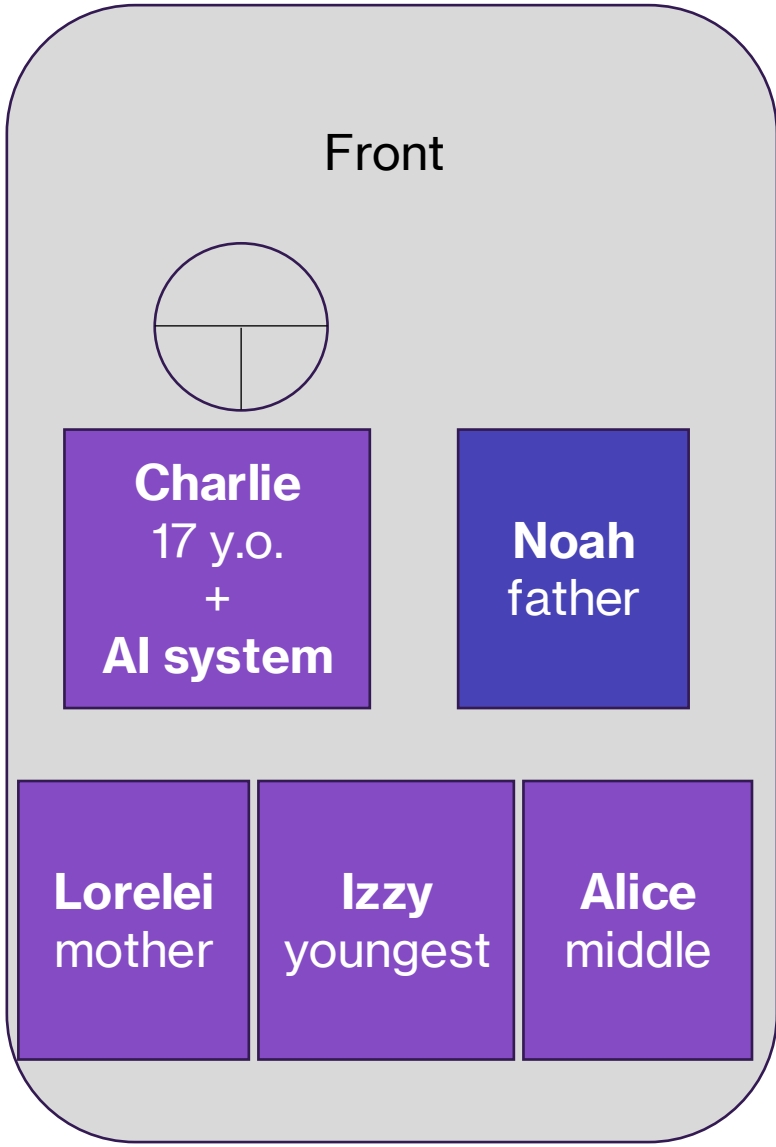
Communication

- If registered, you have been invited to cs51-fall2026 channel in http://slack.pomona.edu
- You can use Slack for questions that everyone in class would benefit knowing the answer to. If it's a personal question, please directly email us.

Ethics of Computer Science

Scenario Activity

- Summary of Culpability by Bruce Holsinger:
  A family is driving their semi-autonomous minivan to a lacrosse tournament. Charlie who's 17 y.o. is sitting in the driver's seat, but the car's self-driving system is engaged and doing the actual driving. His father, Noah, is sitting next to Charlie and is working on his laptop. His mother, Lorelei, who is a researcher who studies the ethics of AI systems and whose work is behind the self-driving system of their car, is working on her notebook in the back. Their two other younger teenagers are seated in the back row. The youngest, Izzy, is texting with Charlie in the front. The middle child, Alice, is aware that Charlie is texting. The van drifts into oncoming traffic and collides with another car, killing its two elderly occupants.



Scenario Activity

- **Individually (5 min):** On your own, rank these six parties from *most* to *least* responsible for the crash: Charlie, Noah, Lorelei, Izzy, Alice, the AI system, the company that built it. Then think of the following prompt and pick a side: "When an autonomous system causes harm, legal liability should rest primarily with the human nearest to the controls." Argue for or against, using specifics from the scenario.
- **Small groups (10 min):** Compare rankings within your group. Where did you disagree? Try to find the single point of disagreement that matters most: was it about *who had control*, *who had knowledge*, or *who could have prevented the crash*?
  What were your thoughts on the prompt?
- **Whole class(10 min):** Each group reports on number 1 pick and what their side is on the prompt above.

Article Activity

- There are four recent news articles to choose from:
  - https://www.npr.org/2026/08/26/nx-s1-5944781/meta-settlement-child-safety-lawsui https://www.npr.org/2026/08/18/nx-s1-5929575/ai-suicide-risks-mental-health
  - https://www.nytimes.com/2026/08/19/technology/data-centers-backlash-loudoun-virginia.html
  - https://www.nytimes.com/2026/08/17/us/student-writing-essays-ai.html
- **Individually (5 min):** On your own, read the article. What did you think?
- **Small groups (10 min):** With your partners, discuss what you thought about the article. What was one surprising thing? What questions do you still have?
- **Whole class(10 min):** Each group provides a summary to the rest of the class about the article they wrote and what they discussed.