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Academic Ethics and Integrity

CS103F: Ethical Foundations of Computer Science
January 22, 2019
Welcome!

• Goals for this semester:
  • Learn to recognize ethical decisions in computer science
  • Learn to understand how those decisions affect you and others
  • Develop the ability to identify the best course of action
  • Develop the courage and stamina to be the person you want to be

• How we’re going to do it:
  • Break apart into medium-sized groups to review case studies of previous week
  • Come together as class to go over broad discussions
  • Introduce case study and background material for upcoming group blog post

• Note that we may or may not cover all background material for the upcoming blog post, so students are expected to read additional slides outside of class
Who is Sarah?

• Education
  • Undergrad in Russian/Media Arts and Sciences from Wellesley
  • MS and Ph.D. in CS from UT Austin

• Teaches: CS354, CS354r, CS349

• Outside Dev
  • Akula Games
  • Local and networked cooperative games
  • Empathy-building through games

• Hobbies
  • Brazilian jiu-jitsu
  • Art and writing
  • Playing video games!
Who is Alison?

• Education
  • Undergrad in CS from Georgia Tech
  • MS and Ph.D. in CS from UT Austin
• Teaching: CS439, CS398T, TA training
• Service
  • WiCS Faculty Advisor
  • Coding in the Classroom and Code Orange (coding outreach programs) faculty advisor
  • Hour of Code Organizer
  • Lab director for First Bytes and Code Longhorn
• Family
  • Married
  • Three children: two boys (11 and 7) and one girl (4)
  • Two dogs (14.5 and 12.9)
A Few Things About the Class: Logistics

• Participation matters... a lot.
  • Goal of this course is to learn to identify, understand, and reason about ethical dilemmas
  • That takes practice
  • Participation matters in class, in your groups, and in your assignments

• Assignments include weekly blog posts
  • Any blogging platform is fine (suggestions and instructions will be included with next week’s assignment)
  • About 300 words, broken up into 3 parts
  • Personal views okay, but should be supported with well-reasoned arguments based in fact

• And peer reviews of those blog posts
A Few Things About the Class: Expectations

• Behave according to the highest standards of ethical conduct
• Maintain academic integrity
  • Learn more today
  • Learn more from the syllabus
• Be polite, professional, and empathetic
  • Disagree with arguments, not people
  • Be kind
Today’s Plan

• Introduction to Ethical Frameworks
• Case Study: Andrew Wakefield
Discuss

Consider an ethical dilemma you’ve faced. Explain the circumstances, why you responded the way you did, and other potential responses to this dilemma.
What are Ethics?

**Calvin and Hobbes**

**Calvin:** Today at school, I tried to decide whether to cheat on my test or not.

**Hobbes:** I wondered, is it better to do the right thing and fail... or is it better to do the wrong thing and succeed?

**Calvin:** On the one hand, undeserved success gives no satisfaction, but on the other hand, well-deserved failure gives no satisfaction either.

**Hobbes:** Of course, most everybody cheats some time or other. People always bend the rules if they think they can get away with it. Then again, that doesn't justify my cheating.

**Calvin:** Then I thought, look, cheating on one little test isn't such a big deal. It doesn't hurt anyone... but then I wondered if I was just rationalizing my unwillingness to accept the consequence of not studying.

**Calvin:** Still, in the real world, people care about success not principles... then again, maybe that's why the world is in such a mess. What a dilemma!

**Hobbes:** So what did you decide?

**Calvin:** Nothing. I ran out of time and I had to turn in a blank paper.

**Calvin:** Anything, simply acknowledging the issue is a moral victory.

**Calvin:** Hell, it just seemed wrong to cheat on an ethics test.
Ethics and Morality

• Morality, from Latin moralis (custom). Actions are moral if they are “good” or worthy of praise

• Ethics, from Greek ἔθος (custom). The formal study of moral standards and conduct

• Goal: construct a general basis for deciding what is moral
What about Laws and Religion?

• These categories are related but...

• Laws are about maintaining order in society
  • Not necessarily ethical

• Religions have diverse approaches to beliefs and behaviors
  • Too broad to study in this class

• Both will come up indirectly in this class though!
What are Ethical Frameworks?

• Systems that guide ethical choices and provide a reason for that choice

• This is an unsolved problem!
  • Numerous approaches that result in vastly different outcomes and behaviors

• Three broad frameworks:
  • Duty-based framework
  • Consequentialist framework
  • Virtue framework
Ethical Theories

• Duty-based (Non-consequentialist)
  • Concerned with agent’s intent rather than consequence

• Consequentialist
  • Concerned with consequence of agent’s actions

• Virtue (Agent-centered)
  • Concerned with ethical makeup of agent
Duty-based

• Often associated with Immanuel Kant’s “categorical imperative”
  • “Act only according to that maxim by which you can at the same time will that it should become a universal law.”
• Ethical conduct means choosing actions that are right and good
• Consider duties and obligations when choosing
Problems?

• Good intents are valued over good outcomes
• Does not answer how to act when two duties conflict
• Does not provide definition of ethical behaviors
Duty-based

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Consequentialist

• Based on Utilitarian philosophy
  • Weights good and bad produced by action to determine overall best action
• Ethical conduct means attempting to do the most good and the least harm
• Considers the impact on all individuals involved when choosing
Problems?

- The needs of the many override the needs of the few
- Any action can be justified if enough good comes out of it
- Does not address how to predict outcomes based on actions
Virtue

• Based on ideas of Aristotle and Confucius
  • Agents should act according to their ideal self
• Ethical conduct means determining an agent’s traits and behaviors and building on those that foster good
• Considers entirety of an agent’s life rather than individual actions
Problems?

• Focuses on personal character rather than a system for determining action
• High level approach requires a depth of understanding and interpretation to implement effectively
• Does not define virtuous traits
Case Study: Andrew Wakefield

• Andrew Wakefield was a doctor in Britain
• In 1998, he published a paper linking the MMR vaccine to autism
• But
  • Results could not be repeated
  • Refuted by other stories
  • Study was small (12 children)
  • Investigations found:
    • Only presented data that upheld his case
    • Data was gathered unethically
    • Wakefield was on the payroll of lawyers trying to sue vaccine manufacturers
• Paper was retracted in 2010, and Wakefield lost his license
Announcements

• Blog response to the Andrew Wakefield study is due before next class
  • Details linked off the schedule
• This one you’ll do individually, but you’ll work with a group for the others