Ethical Foundations of Computer Science
Purpose

• Inform and motivate ethical action in the world
  • Personal and public awareness
  • Personal and professional conduct
• Encourage good oral and written communication skills
  • Clear, concise writing
  • Clear, concise public speaking
Course Work

• Weekly group blog posts on case studies
  • Use any flavor of blogging platform
  • Should be ~250 words long
  • Can express personal views but remain professional and avoid unsupported arguments
• Daily discussion and group presentations
Course Format

- One group will present on a case study from the previous week
- We will present background material on that day’s topic
- Class will break into group to discuss the case study
Course Expectations

• Behave according to the highest standards of ethical conduct

• Things you should not do:
  • Plagiarize
    • Copying ideas or direct quotes without giving credit to originator
  • Ad hominem attacks
    • Criticizing the person rather than the argument
Safe Space?

• This is not a safe space…

• But it’s also not an unsafe space

• …basically you are expected to behave as a polite, professional, empathetic person

• Ask yourself:
  • Am I being kind?
  • What am I accomplishing by saying what I’m saying?
Let’s Talk Ethics!

• What systems of ethics do you follow?

• How do your beliefs impact your behavior in the world?
TODAY AT SCHOOL, I TRIED TO DECIDE WHETHER TO CHEAT ON MY TEST OR NOT.

I WONDERED, IS IT BETTER TO DO THE RIGHT THING AND FAIL... OR IS IT BETTER TO DO THE WRONG THING AND SUCCEED?

ON THE ONE HAND, UNDESERVED SUCCESS GIVES NO SATISFACTION... BUT ON THE OTHER HAND, WELL-DESERVED FAILURE GIVES NO SATISFACTION EITHER.

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.

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.

STILL, IN THE REAL WORLD, PEOPLE CARE ABOUT SUCCESS, NOT PRINCIPLES.

SO WHAT DID YOU DECIDE?

...THEN AGAIN, MAYBE THAT'S WHY THE WORLD IS IN SUCH A MESS.

WHAT A DILEMMA!

NOTHING. I RAN OUT OF TIME AND I HAD TO TURN IN A BLANK PAPER.

ANYMORE, SIMPLY ACKNOWLEDGING THE ISSUE IS A MORAL VICTORY.

WELL, 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 ἴθος (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 Can be Moral?
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
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
What Systems of Ethics Do you Use?
Question

• Which is more important: saving a life or obeying the law?
Case Study

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