



# Introduction to Ethics

CSCI 392: Seminar in Computing and Society

College of Charleston

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# Possible Presentation Topics

- User Interface/Inclusive Design
- Cyber Security Defense
- Cyber Security Offense
- Virtual and Augmented Reality
- Machine Learning/Data Mining
- Spatial Computing
- Technology in Healthcare
- Virtual Production
- Computing in the Natural Sciences
- Graduate Studies in Computing
- Malware
- Artificial Intelligence
- Underrepresentation in Computing
- Intellectual Property in the Digital World
- Freedom of Speech and the Internet
- Computing in Music
- Computer Failures
- Privacy and Data Collection
- Computing in Policing & Justice
- Computing in Biometrics & Genomics
- Online Harassment
- Big Tech Work Culture, Recruitment, Pay, Hiring, Career Advancement
- Computing History
- Design Justice
- Discrimination in Computing
- Intelligent Transportation Systems
- Wearable Technologies
- Gaming Industry
- Technology in Banking
- Cryptocurrency
- Supply Chain Management
- Online Advertising
- Business Analytics
- Topic of choice

# Why?

1. Learn to identify ethical issues
2. Learn to analyze ethical issues using ethical theories
3. Learn to persuasively argue for the conclusion of your analysis
4. Apply ethical skill set to the real world

# Ethics

- Core philosophical discipline
- Philosophical analyses and arguments are based on *reason*
- Ethics investigates, using *reason*, what is *the best way for humans to live*, and what kinds of *actions are right or wrong* in particular circumstances.

# Ethics

- Simply, ethics is a system of moral principles, which affect how people make decision and live their lives
  - how to live a good life?
  - rights and responsibilities
  - right and wrong\*
    - not always this clear, often you arrive at *decisions* rather than *conclusions*
  - what is good for individuals and society?

Ethics ≠ Feelings, Gut Instincts

Ethics ≠ Law

# Why Study Ethics?

Self:

- provides you with ethical frameworks that you can use to *analyze different courses of action* or view *difficult issues* from a less emotionally charged perspective;
- enables you to make *principled judgments* regarding your choices; and
- helps make you a more *thoughtful, tolerant, and intellectually responsible* person able to assess the strength of your opinions and the opinions of others

# Why Study Ethics?

Others:

- learn to *better understand others' views*
- *identify* what part of an issue is *the source of disagreement*
- promotes *more productive and civil dialogue* with others as well as an *appreciation for the significant nuances* of many critical issues.

# Why Study Ethics?

- Thinking ethically, you give at least some thought to something other than yourself
- Often ethics provides no right answers
- Often no single answer, just options
- Degree of 'right' and 'wrong'
- Make decisions in the presence of moral ambiguity



# A Common Worry

“Sooo...I don't get it...there aren't definite answers?”

# Can you support your point of view?

- The answers may not be definite, but *some arguments are better than others*
- Sort of like designing a house -- there are different ways to do so, but some designs are better than others

# Ethics – Key Concepts

Argument:

- Assert a point of view (your conclusion) and give reasons (premises) to support that view

Any time you've tried to persuade someone of something, you were giving an argument for your point of view

conclusion

EX: It would be wrong to write a DNR order on this comatose patient without involving the surrogate because the surrogate has the right to decide if this patient should be on DNR.

premise

# Ethics – Key Concepts

Argument: It would be wrong to write a DNR order on this comatose patient without involving the surrogate because the surrogate has the right to decide if this patient should be on DNR.

conclusion

Counterargument: It is ethically appropriate to write a DNR order on this comatose patient without involving the surrogate because the patient previously indicated that they wanted to be on DNR.

premise

Argument: The right thing to do is to involve the surrogate before writing a DNR order because failure to do so will undermine trust.

# Ethics - Theories

- **Consequentialism** – The consequences of your actions should decide what is right versus what is wrong. [Consequences]
- **Deontology** – The duty (moral obligations or rules) should decide right vs wrong. (Kant) [Duty]
- **Virtue Ethics** – The right thing to do is the virtuous thing...courage, truthfulness, intelligence, modesty, enthusiasm, creativity,.... [Virtues]

# The Trolley Problem – Autonomous Cars

- You are standing near a lever that will switch the tracks. There is an oncoming train. On its current path, it will kill five people who are unfortunately stuck on the track. If you switch the lever, the train will move to the other track where there is one person stuck on the track. What to do? (Consequentialist, Deontologist, Virtue Ethics)
- You are a programmer for a smart car and it's your job to write the moral code for the car. What should you do? (Consequentialist, Deontologist, Virtue Ethics)

# Identifying Ethical Issues

Conducting an ethical analysis is a multi-step process

Follows: A user-friendly step-by-step list of how to ethically analyze a particular situation.

The most critical stage is where we evaluate the available actions using the three ethical frameworks.

Based on the 10-step [Framework for Ethical Decision Making](#) developed by the Markkula Center for Applied Ethics at Santa Clara University

# A Framework for Ethical Decision Making

## A. Recognize an Ethical Issue

- Could a decision/situation damage someone or a group? Is the outcome the best option or the least bad?

## B. Get the Facts

- Do I have sufficient knowledge? Who are the stakeholders and have they been consulted? Are some concerns more important than others?

## C. Evaluate Alternative Actions

- Which option will do most good and least harm (utilitarianism)? Which option treats all equally/proportionately/fairly? Which option serves the many vs the few (deontology)? Which option leads me to act as the person I want to be (virtue ethics)?

## D. Make a Decision and Test It

- What is the best option? If I told someone I respected would they think so too?

## E. Act and Reflect on the Outcome

- How do I best implement the decision? How did it turn out and what did I learn?



# Constructing Ethical Arguments

Provide a strong, well-developed argument for a clear answer to a well-defined question about the morality of a particular action.

You're trying to persuade another person that your ethical analysis is the right one and that *they should adopt your conclusion*.

*A good argument* justifies the acceptance of the conclusion.

# A Good Argument

Are the premises true?

- An argument is valid when the truth of the premises *guarantees* the truth of the conclusion
- An argument is sound if it's valid and all premises are true

To what extent do the premises support the conclusion?

- e.g. >95%, then the argument is strong
- e.g. <50%, then the argument is weak

# Common Forms of Valid Arguments

## Modus Ponens

If P, then Q.

P.

→Q.

If he doesn't like her kids, then he shouldn't marry her.

He doesn't like her kids.

→He shouldn't marry her.

# Common Forms of Valid Arguments

## Modus Tollens

If P, then Q.

Not Q.

→ Not P.

If the exam were fair, then someone would have passed it.

No one passed the exam.

→ The exam was not fair.

# Common Forms of Valid Arguments

## Disjunctive Syllogism

Either P or Q.

Not P.

→Q.

Either she's going to invite me to her wedding, or our friendship is over.

She's not going to invite me to her wedding.

→Our friendship is over.

# Common Forms of Valid Arguments

## Hypothetical Syllogism

If P, then Q.

If Q, then R.

→ If P, then R.

If Americans have a right not to be left to starve, then Americans have a right not to be left to die of disease.

If Americans have a right not to be left to die of disease, then Americans have a right to basic health care.

→ Therefore, if Americans have a right not to be left to starve, then Americans have a right to basic health care.

# A Good Argument?

Ex:

Harold has applied to Harvard law school many times, but has been rejected every time.

Harold is applying for Harvard law school again.

→ Harold will be rejected by Harvard law school again.

**Valid?** No. Just because Harold has been rejected before, doesn't mean he'll be rejected again

**Strong?** Yes. Even stronger if we add a premise that Harold's test scores or qualifications haven't improved since last time he applied

# A Good Argument?

Ex:

In order to be served here, you must be 21 or older.

You are not 21 or older.

→ You will not be served here.

**Valid?** Yes. Modus Tollens (If P, then Q. Not Q. → Not P)

**Sound?** Yes. Valid and all premises are true



# A Good Argument?

Ex:

Cats are gentle creatures.

Gentle creatures don't harm humans.

→ My cat won't harm me.

**Valid?** Yes. Modus Ponens. (If P, then Q. P. →Q)

**Sound?** Debatable. Are all these premises right?

# Constructing Ethical Arguments

1. State the question
2. Put forth the moral principle you're using
3. State the facts of the situation
4. Apply the facts to the principle and persuasively argue for your conclusion: convince the reader that you properly analyzed the situation and that they should adopt your conclusion

# Constructing Ethical Arguments

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5. Raise the strongest objections that you can foresee to your argument.

# Constructing Ethical Arguments

Argument: The death penalty is wrong because it violates the sanctity of human life.

Objection: What about when the person is on death row for taking another's life?

# Constructing Ethical Arguments

1. State the question
2. Put forth the moral principle you're using
3. State the facts of the situation
4. Apply the facts to the principle and persuasively argue for your conclusion: convince the reader that you properly analyzed the situation and that they should adopt your conclusion
5. Raise the strongest objections that you can foresee to your argument.
6. Respond to those objections and argue as to why the objection can be met, and that your conclusion still stands.

# Raising Objections

- An objection is the reasons another person might disagree with your argument, i.e. point out reasons why your argument is weak.
- To find an objection, it's necessary to adopt the perspective of *someone reasonable who disagrees* with your view and then ask “what would they have to say about this argument?”
- The aim of the objection is to strengthen your own argument. It's essentially telling your reader/listener that you're aware of a problem in your argument and that you can deal with it.

# Constructing Ethical Arguments

“People generally quarrel because they cannot argue.”  
- G. K. Chesterton, 1929

# Constructing Ethical Arguments

File Sharing Is it morally permissible to share copyrighted content over peer-to-peer computer networks? (Notice the question is about morality, not legality).

First Date On a first date, is a person morally obligated to reveal that he or she is dating another person, even if not asked?

Eating Steak Suppose a vegetarian who objects to eating animals is eating lunch with a non-vegetarian. Would it be rude for the non-vegetarian to eat a steak?

Rowdy Neighbors You are awakened by the sound of drunken neighbors who are having a large party involving alcohol and loud music at 2 in the morning. Are you obligated to talk to your neighbors first, or is it appropriate to call the police immediately?

Construct a valid argument for/against based on  
Consequentialism /  
Utilitarianism,  
Deontology,  
Virtue Ethics



# When Presenting , Remember

- Be very mindful of your language, especially when referencing under represented groups or groups you are not a part of
- Try not to send microaggressions but if you unintentionally do and you catch yourself or you are called out, don't get defensive, just apologize

# When Presenting, Remember

- People are different, be respectful of those differences
- Different people have different experiences
- Different people have different opinions because of their experiences
- Your opinion doesn't necessarily make you right and doesn't necessarily make everyone who disagrees with you wrong
- Stick to facts; when you offer opinions, say they are opinions and don't be forceful
- Be intentional with and aware of your language
- Inject humor, it makes everything better

# When Listening to Presentations, Remember

- People are different, be respectful of those differences
- Different people have different experiences
- Different people have different opinions because of their experiences
- Hear each other out
- Try not to get worked up
- Assume whatever you heard that hurt you or annoyed you was unintentional
- Even if it was intentional, your emotions and anxiety are better expended on things that are more important

## Also, if applicable, consider Business Ethics

- Responsibility – moral commitment to community, the environment, employees, customers/users, and clients
- Fairness - all employees are treated as equals, commitment to diversity and equal opportunity
- Honesty and integrity
- Trust - reliability, transparency, and honesty for all employees; clients/users' confidential information, contractual obligations, data, and money
- Respect – within the organization (among employees and between the organization and its employees), and for clients/users
- Loyalty – organization to employees and vice versa

(not exhaustive)